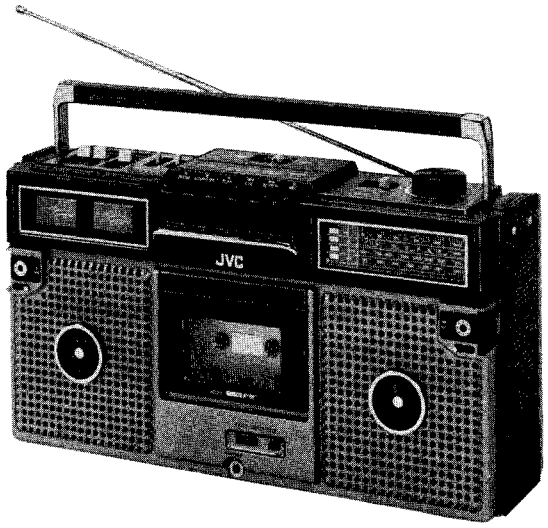
JVC

SERVICE MANUAL

MODEL
RC-717L,LB

FM-LW-MW-SW
4-BAND RADIO
STEREO CASSETTE
RECORDER



No. 1332
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Specifications

DIMENSIONS : 22.0cm(H) x 41.0cm(W) x 11.4cm(D)
$8^1/_2$" x $16^1/_8$" x $4^1/_2$"

WEIGHT : Approx. 4.7 kg (with batteries)
10.3 lbs.

TUNER SECTION

Frequency Ranges	:	FM 88 ~ 108MHz
		LW 150 ~ 350kHz
		MW 540 ~ 1600kHz
		SW 6 ~ 18MHz
Intermediate Frequencies	:	FM 10.7MHz
		LW/MW/SW 455kHz

RECORDER SECTION

Tape Speed	:	4.75cm/s (1-7/8 ips)
Track System	:	4-track 2-channel stereo
Recording System	:	AC Bias
Erasing System	:	AC Erasing
S/N Ratio	:	More than 46dB at 1kHz
Fast Forward Time	:	Within 100 sec. (C-60 cassette)
Rewinding Time	:	Within 100 sec. (C-60 cassette)
Wow & Flutter	:	0.15% (WRMS)

AMPLIFIER SECTION

Speakers	:	12cm (5") x 2 4Ω
Power Output	:	Max. 5.0 (2.5 + 2.5)W (DC)
Input Jacks	:	MIC x 2 (0.8mV, low imp.)
Output Jacks	:	Ext. Speaker x 2 (4Ω) Headphones (8Ω)
DIN Jack	:	Input Imp.; less than 4kΩ Output Imp.; less than 10kΩ

POWER CONSUMPTION

RC-717L	:	11W (at RMS power output)
RC-717LB	:	9W (at 10% T.H.D. power output)

SEMICONDUCTORS

ICs	:	2
Transistors	:	30
Diodes	:	32

POWER SOURCE

DC	:	9V 6 "R20" cells or equivalent
AC	:	110/220/240V 50/60Hz (L) 240V 50/60Hz (LB)

Main Parts Location

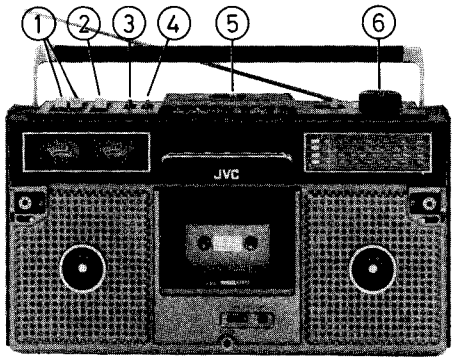


Fig. 1

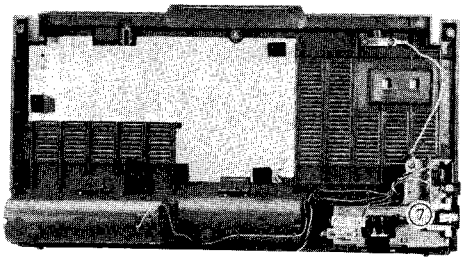


Fig. 2

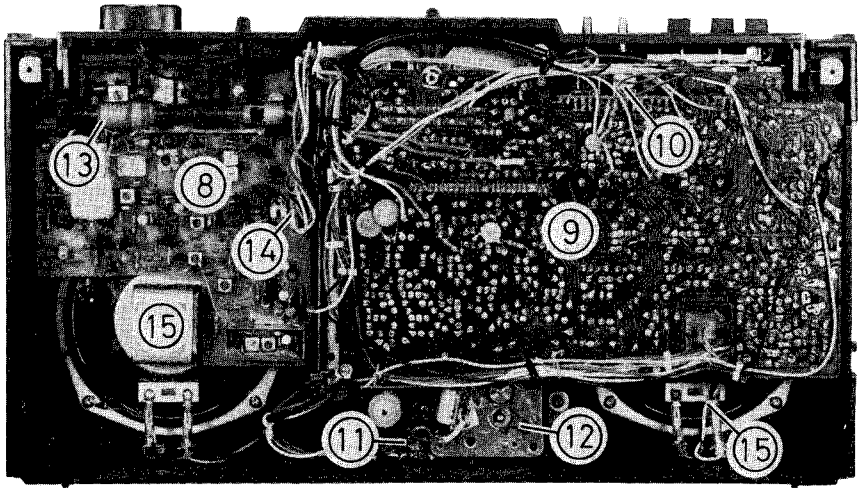


Fig. 3

Ref. No.	Parts No.	Parts Name	Description
1	* V44900-002	Knob	Volume
2	* V44900-002	"	Tone
3	V44580-001	Lever Cap	Mode/Meter
4	V44580-001	"	Tape
5	* V44898-002	Knob	Function (Removable)
6	* VXKP240-30020	"	Tuning
7	* ————	Power Supply Ass'y	
8	* ————	Circuit Board Ass'y	Tuner
9	* ————	"	Amplifier
10	* ————	"	Control
11	* ————	"	Headphone
12	* ————	Cassette Mechanism	
13	VQB012B-006	Bar Antenna Ass'y	L10, 11
14	QMC0659-001	Socket Ass'y	6-pin
15	EAS12P89SE	Speaker	

Note: 1. Asterisked parts (*) show "NEW PARTS". Other parts are all "CURRENT PARTS"; therefore, check your inventory and order situation before placing new order to avoid making extra stock.
2. The circuit board assemblies and whole assembly of cassette mechanism in this model will not be available as spare parts.

Disassembly & Replacement

Rear Cabinet (Refer to Fig .4)

1. Remove 6 screws (1)~(3):SDSP3020RS and (4)~(6):SDSB3020R.
2. Disconnect 4 connecting wires from rod antenna (White), right speaker (Black), negative (Black) and positive (Red) terminals of power supply section.

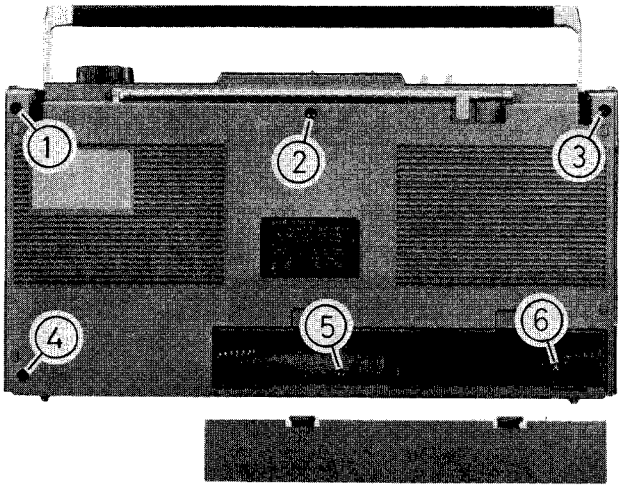


Fig. 4

Tuner Section (Refer to Fig. 5)

1. Take off tuning knob (A).
2. Disconnect the 6-pin socket from the amplifier section.
3. Remove 2 screws (7) & (8):SBSB3008Z.

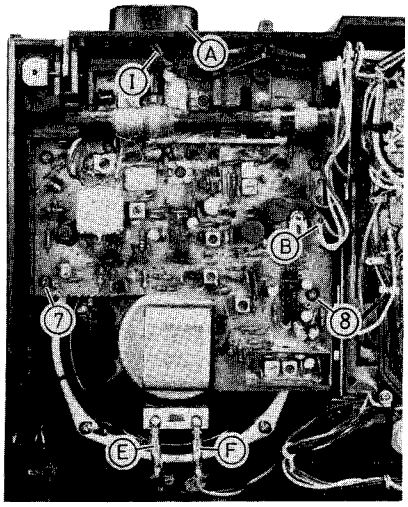
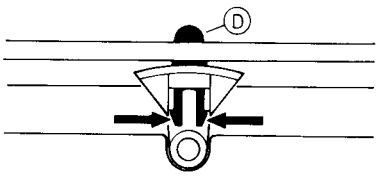


Fig. 5

Cassette Mechanism Section (Refer to Figs. 5 & 6)

1. Take off volume and tone control knobs (C).
2. Pull up the function switch knob (D) by pressing the arrow positions.
3. Disconnect 4 speaker cords : Black (E) & Red (F) of right speaker and Blue (G)) & White (H) of left speaker, and the connector (I).
4. Remove 4 screws (9)~(12):SBSB3010Z.
5. Then the mechanism section can be turned over to the tuner section.



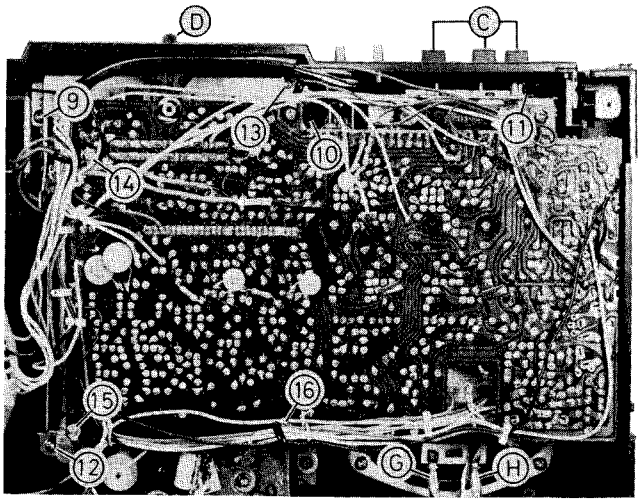


Fig. 6

Amplifier Circuit Board (Refer to Fig. 6)

Remove 4 screws (13)~(16):SPSP2606Z.

Power Supply Section (Refer to Fig. 7)

Remove 3 screws (17)~(19):SBSB3010Z.

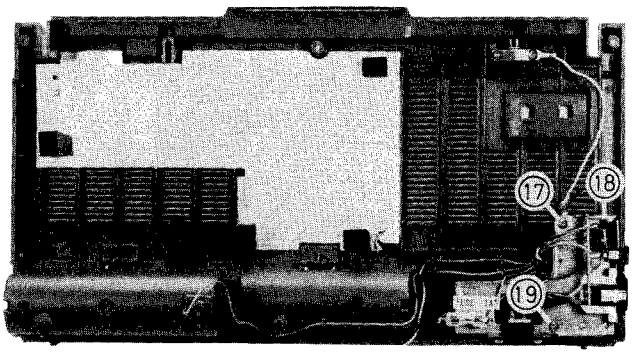


Fig. 7

Pinch Roller Ass'y (K) (Refer to Fig.8)
Remove the E-ring (20): REE1900.

Play/record Head (L) (Refer to Fig. 8)
Remove 2 screws (21):SPSP2011Z and (22):SPSX2006Z.

Erase Head (M) (Refer to Fig. 8)
Remove 2 screws (23):SPSP2011Z.

Rewind Idler (N) (Refer to Fig. 8)
Remove the E-ring (24):REE1500.

Take-up (O) and Supply (P) Reel Disk (Refer to Fig.8)
Remove the E-ring (25):REE1200.

Main Belt (Q) (Refer to Fig. 9)
1. Remove the screw (26):LPSP2605Z.
2. Remove the flywheel bracket (R).

Motor (S) (Refer to Fig. 9)
Remove 3 screws (27):SPSP2607Z.

F.F. Idler Ass'y (T) (Refer to Fig. 9)
1. Remove the flywheel bracket (R).
2. Detouch 3 springs (U), (V) & (W).
3. Remove the E-ring (28):REE4000.

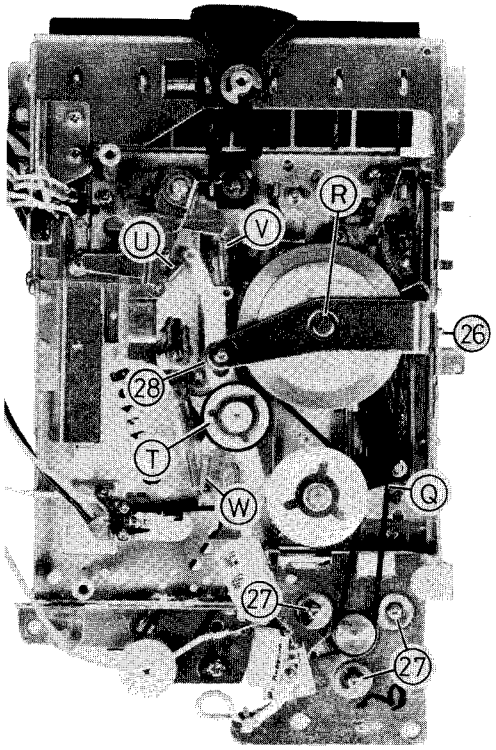


Fig. 9

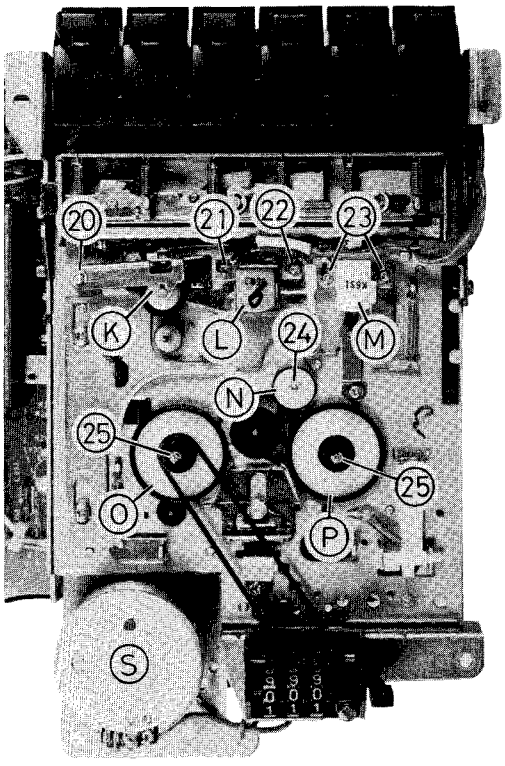


Fig. 8

How to Fit Dial Cord

1. Fit cord in accordance with the arrow mark while setting the variable capacitor on minimum.
2. Cord length ϕ0.6 x 895mm.

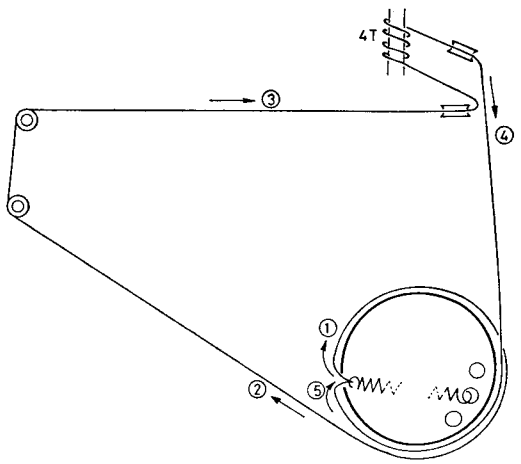


Fig. 10

Tuner Alignment

Output Measuring: Speaker terminal **(Impedance =4Ω), output level 50mW (0.45V/4Ω)**

AM IF & RF Alignment

Input (SSG) Modulation 400Hz, Modulated to 30%

Step	Frequency Band	Input Signal		Place to be aligned	Set the V. Capacitor to
		Frequency	Given to		
1	MW (IF)	455kHz	Loop Antenna	L15, 16, 17	Minimum
2		Repeat the Step 1, and adjust for no further improvement.			
3	MW	520kHz	Loop Antenna	L13	Maximum
4		1650kHz		C12	Minimum
5		Repeat the Steps 3 & 4.			
6		600kHz	Loop Antenna	L10	600kHz Signal
7		1400kHz		C7	1400kHz Signal
8		Repeat the Steps 6 & 7, and adjust for no further improvement.			
9	LW	145kHz	Loop Antenna	L14	Maximum
10		360kHz		C10	Minimum
11		Repeat the Steps 9 & 10.			
12		160kHz	Loop Antenna	L11	160kHz Signal
13		350kHz		C8	350kHz Signal
14		Repeat the Steps 12 & 13, and adjust for no further improvement.			
15	SW	5.8MHz	Rod Antenna through Dummy Antenna	L12	Maximum
16		18.6MHz		C11	Minimum
17		Repeat the Steps 15 & 16.			
18		6.0MHz	Rod Antenna through Dummy Antenna	L9	6.0MHz Signal
19		18.0MHz		C9	18.0MHz Signal
20		Repeat the Steps 18 & 19, and adjust for no further improvement.			

FM IF & Discriminator Alignment

1. Connect a sweep generator to the test pints TP3 (Hot) and TP2.
2. Connect a oscilloscope to the test points TP7 (Hot) and TP8.
3. Align the L20 so that the response of S-curve will change to a peak. (Refer to Figs. 11 & 12.)
4. Align the L7, 18, 19 & 23 so that the wave form will become maximum and symmetrical at the centre frequency.
5. Align the L20 so that the S-curve will become symmetrical and maximum. (Refer to Fig.13.)

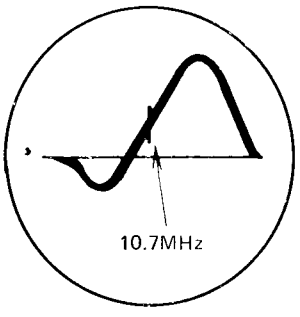


Fig. 11

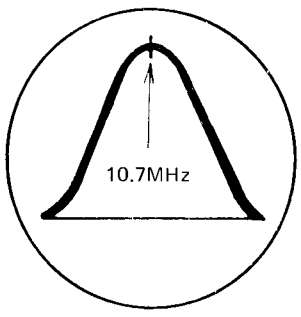


Fig. 12

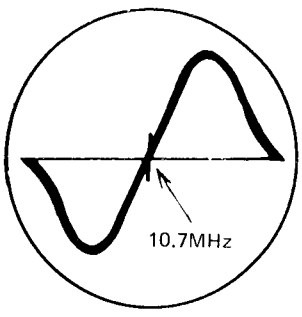


Fig. 13

FM RF Alignment

Input (SSG): Use 75Ω terminal, modulation 400Hz modulated to 22.5kHz deviation.
Connect Hot side to TP1 and Cold side to TP2.

Step	Frequency Band	Input Signal		Place to be aligned	Set the V. Capacitor to
		Frequency	Given to		
1	FM	87.5MHz	TP1 & TP2 (Refer to Fig. 14)	L6	Maximum
2		109MHz		C6	Minimum
3		Repeat the Steps 1 & 2.			
4		90MHz	TP1 & TP2 (Refer to Fig. 14)	L4	90MHz Signal
5		106MHz		C5	106MHz Signal
6		Repeat the Steps 4 & 5, and adjust for no furhter improvement.			

FM MPX Alignment

A. Regular Method

1. Connect a frequency counter to the test points TP6 (Hot) and TP8.
2. Connect the lead of R56 to the case of L19.
3. Adjust the variable resistor R48 so that the frequency becomes 19kHz±250Hz.

B. Simplified Method

1. Tune to a FM stereo broadcast.
2. Set the variable resistor R48 to a centre position of the range where the stereo indicator keeps lighting.

Parts Arrangement for Alignment

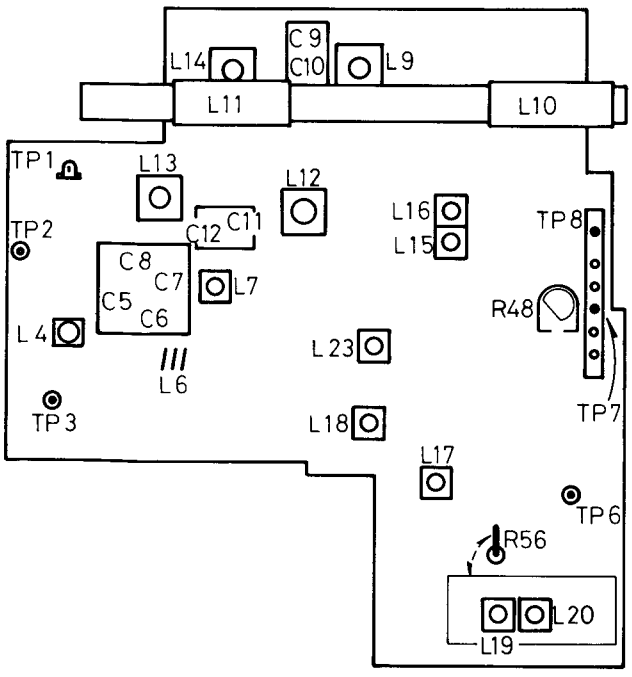
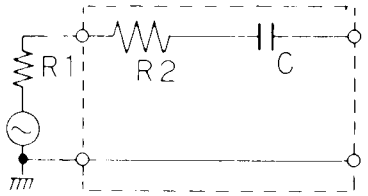


Fig. 14

Dummy Antenna



R1 + R2 = 80Ω
C = 10pF
R1: Output impedance of S.S.G.

Fig. 15

Adjusting Recording Bias

Bias Frequency

1. Connect a frequency counter across A-B or C-D.
2. Set the BEAT CUT switch to lower position.
3. Adjust the oscillator coil L401 so that the counter indicates 71kHz.

Bias Current

1. Connect a V.T.V.M. across A-B and C-D.
2. Adjust the variable resistor R254(L) and R354(R) so that the voltage becomes 5mV (500μA/10Ω).

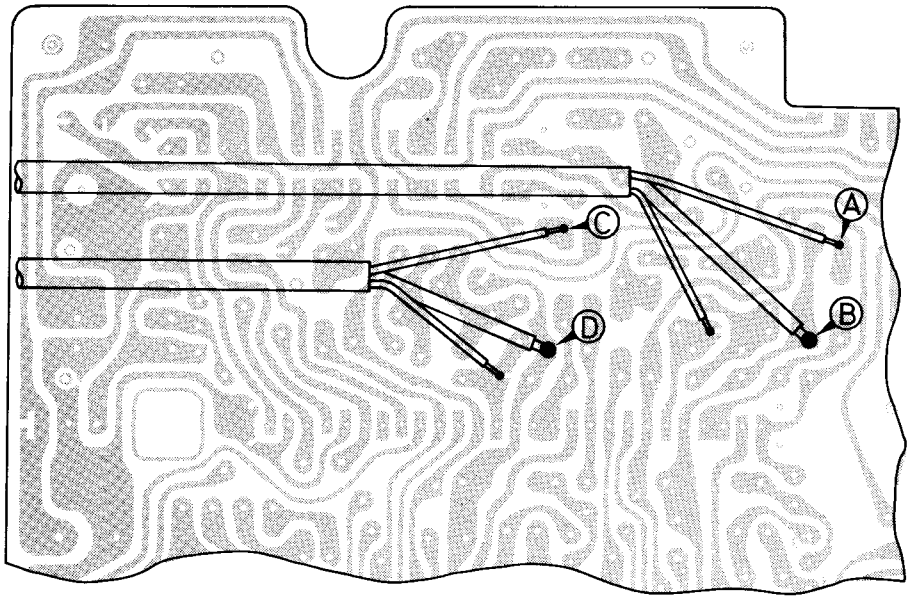


Fig. 16

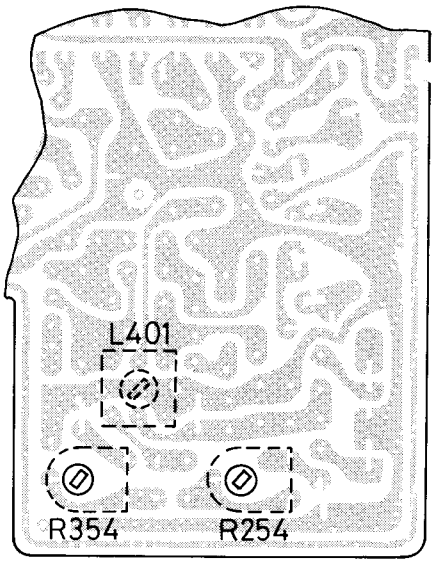


Fig. 17

Adjusting Head Azimuth

1. Connect a V.T.V.M. Across the speaker terminal.
2. Set the MODE switch to MONO.
3. Playback the test cassette for azimuth adjustment.
4. Adjust the head angle for maximum output.
   Note: The output voltage shows three peaks while adjusting head angle as illustrated on the right, adjust for maximum peak.
5. Check that the output difference between MONO and STEREO is within 4dB.

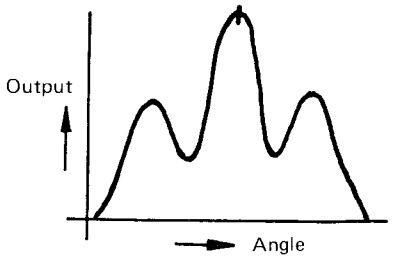


Fig. 18

Adjustment of Cassette Mechanism

Timing of Auto Stop Motion

1. The auto stop mechanism should function at the moment when the tip of stop detect contact has been moved within 0.5 to 1.8mm in the playback mode.
2. If the timing is more than 1.8mm, bend the part (A) of stop detect lever to the B direction. If it is less than 0.5mm, bend the part (A) to the C direction.

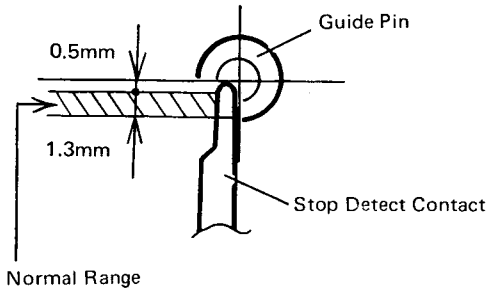


Fig. 19

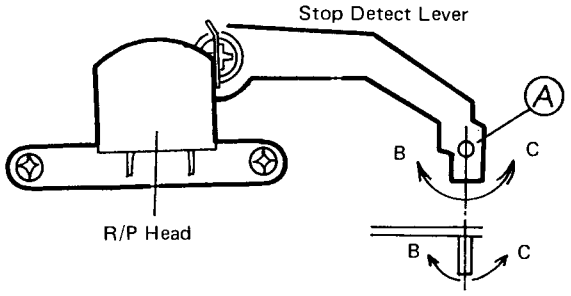


Fig. 20

Detection pressure of Auto Stop Mechanism

1. Setting the mechanism vertically in the playback mode, the auto stop mechanism should function at the pressure of 45 to 65g when the tip of stop detect contact has been pulled upwards by a tension gauge. (Refer to Fig. 22)
2. If the pressure is less than 45g, bend the part (A) of adjusting arm to the B direction. If it is more than 70g, bend the part (A) to the C direction.

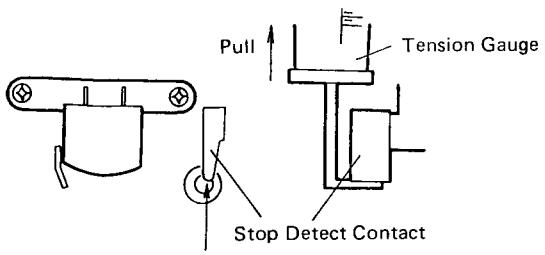


Fig. 21

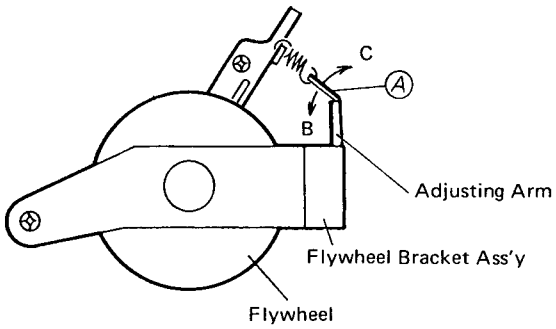


Fig. 22

Thrust of Flywheel

The clearance between the top of flywheel shaft and the flywheel bracket should be within 0.2 to 0.4mm. If the clearance is beyond the limits, adjust the screw for normal value.

Note: After adjustment, fix the screw with lock adhesive.

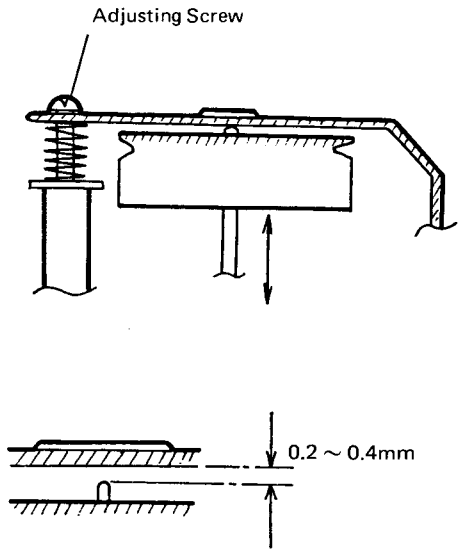


Fig. 23

Pause Mechanism

1. In the playback mode, check to see that the pinch roller separates from the capstan shaft and stops turning and then the reel disk stops turning and the tape stops when the PAUSE button has been pressed. Check to see that the tape restarts and is normally transported when the PAUSE button is released.

2. If the timing of pause mechanism is out of order: the takeup reel disk stops first and then the pinch roller stops, so that the tape is projected from the cassette half.
   Adjust the timing by bending the part (C) of pinch arm lever to the A direction.
3. The space between the pinch roller and the capstan shaft should be more than 0.5mm. If it is less than 0.5mm bend the part (C) to the A direction, and if it is excess bend the part (C) to B direction.

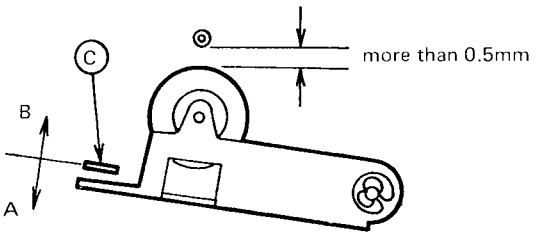


Fig. 24

Cue & Review Mechanism

1. Timing of Cue Action

a. In the playback mode, if the CUE button is gradually pressed, the pinch roller stops turning first and then the takeup reel disk stops. If the CUE button is released, the takeup reel disk turns first and then the pinch roller rotates.

b. If the timing is out of order, adjust it as follows.
   1) If the tape is projected from the cassette half at the beginning of cue action, adjust it by bending the part (C) of pinch arm lever to the A direction as shown in Fig. 24.
   2) If the tape is fast forwarded at the beginning of cue action, bend the part (C) to the B direction as shown in Fig. 24.

2. Timing of Review Action

a. In the playback mode, if the REVIEW button is gradually pressed, the pinch roller stops turning first and then the takeup reel disk stops. If the REVIEW button is released, the takeup reel disk turns first and then the pinch roller rotates.

b. If the timing is out of order, adjust it as follows.
   1) If the tape is projected from the cassette half at the beginning of review action, bend the part (C) to the A direction as shown in Fig. 24.
   2) If the tape is fast forwarded at the beginning of review action, bend the part (C) to the B direction as shown in Fig. 24.

Notes: 1. After adjustment, if the pinch arm lever has been bended, check the pause timing and check that the gap between the pinch roller arm and pinch arm lever is more than 0.2mm when the REVIEW button is pressed in the recording mode.

2. After adjustment check that the gap between the RQ boss and the pinch roller arm plate is within 0.7 to 1mm. If it is beyond the limits, adjust it by bending the part (A) of pinch roller arm plate as shown in Fig. 26.

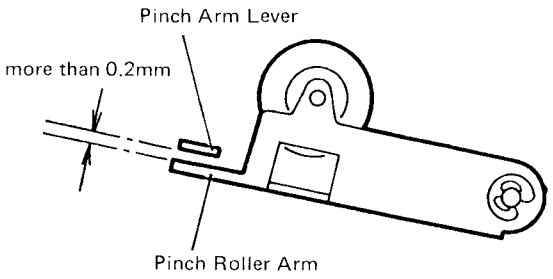


Fig. 25

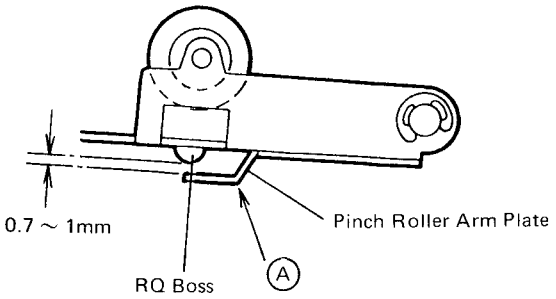


Fig. 26

Location of Heads

The record/play and erasing heads should be positioned as shown below.

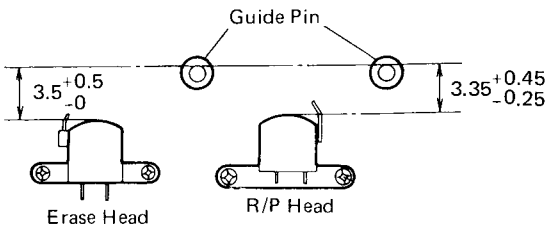


Fig. 27

Contact Pressure of Pinch Roller

In the playback mode and vertical position, the pinch roller should stop turning within 450 to 550g when the arrow position of pinch roller arm is gradually pulled by the tension gauge.

If the pressure is out of limit, change the spring or adjust the pressure by bending the spring.

Notes: 1. If the pressure is excessively over the limit, it may cause wow & flutter or cause crake from the pinch roller bearings.

2. If the pressure is defectively weak, it may cause wow & flutter or cause defect of auto stop motion.

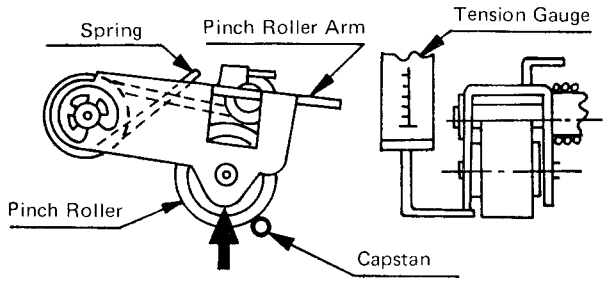


Fig. 28

Playback Torque

1. The playback torque should be within 40 to 70g-cm.
2. If the torque is less than 40g-cm, set the clutch spring to the 3 position. If it exceeds 70g-cm, set the clutch spring to the 1 position.

Note: Before adjusting the torque wipe off the surface of rubber parts and rotating parts, if the torque is not sufficient.

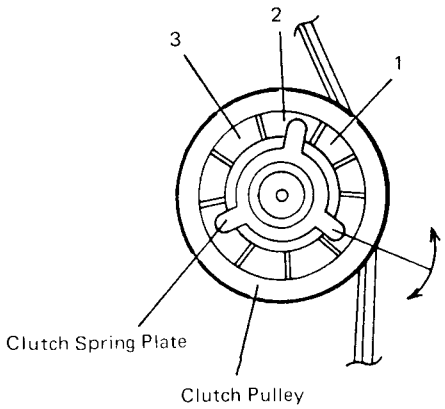


Fig. 29

Adjustment of F.F. & Rewind Torque

1. Fast Forward Torque

In the fast forward mode, check that the F.F. torque is within 60 to 150g.cm by applying the torque gauge to the take-up reel disk.

a. If the torque is less than 60g.cm, adjust as follows.
   1) If the rotation of F.F. idler which is contacted with the flywheel stops or fluctuates when the take-up reel disk is stopped turning by the fingers, bend the part A of F.F. button lever to the C-direction.
   2) If the F.F. idler contacted with the flywheel is turning constantly when the take-up reel disk is stopped turning, turn the three-flap clatch spring plate clockwise (4→3→2→1) to obtain the proper torque.

b. If the torque is over 150g.cm, turn the clatch spring plate counterclockwise (1→2→3→4) to obtain the proper torque.

2. Rewind Torque

In the rewind mode, check that the rewind torque is within 60 to 150g.cm by applying the torque gauge to the supply reel disk.

If the torque is out of standard, adjust it as same method as items a. & b. of "Fast Forward Torque".

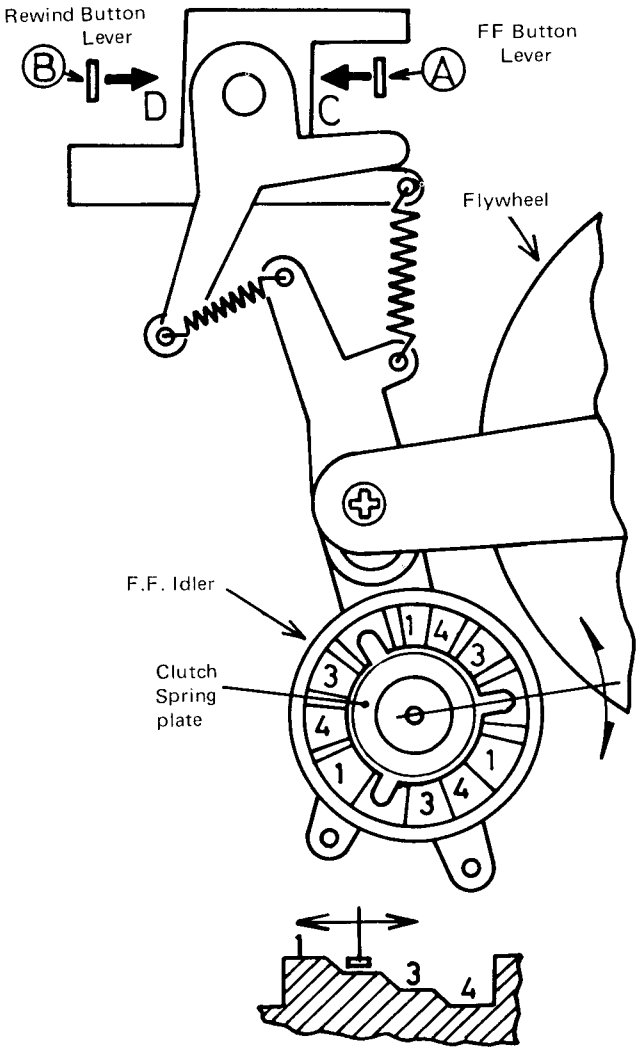


Fig. 30

Block Diagram

Playback & Radio Reception Mode

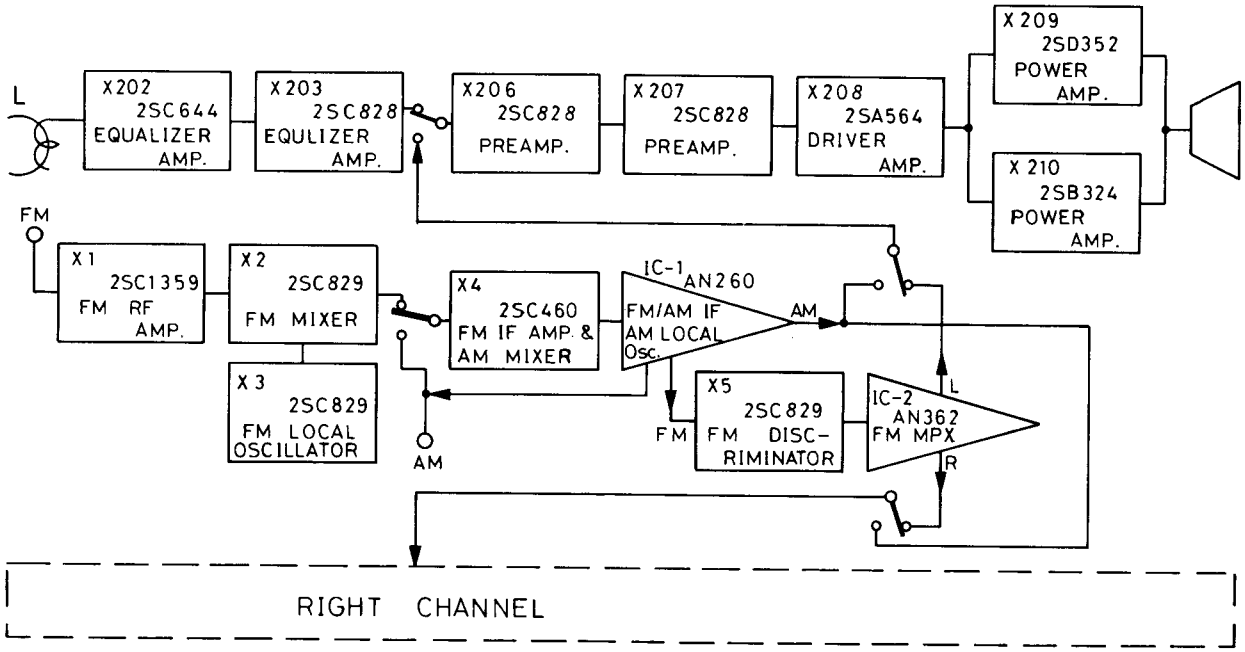


Fig. 31

Recording Mode

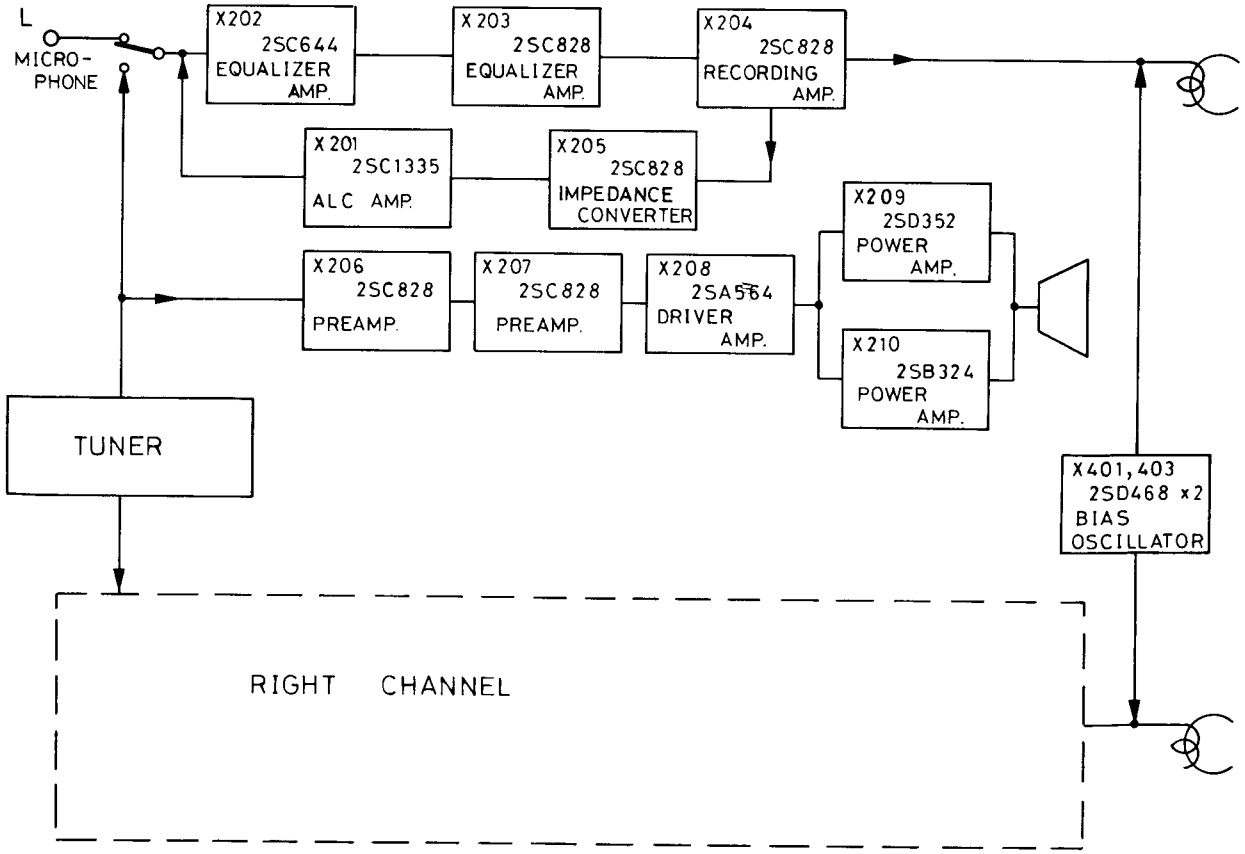


Fig. 32

Wiring Connection

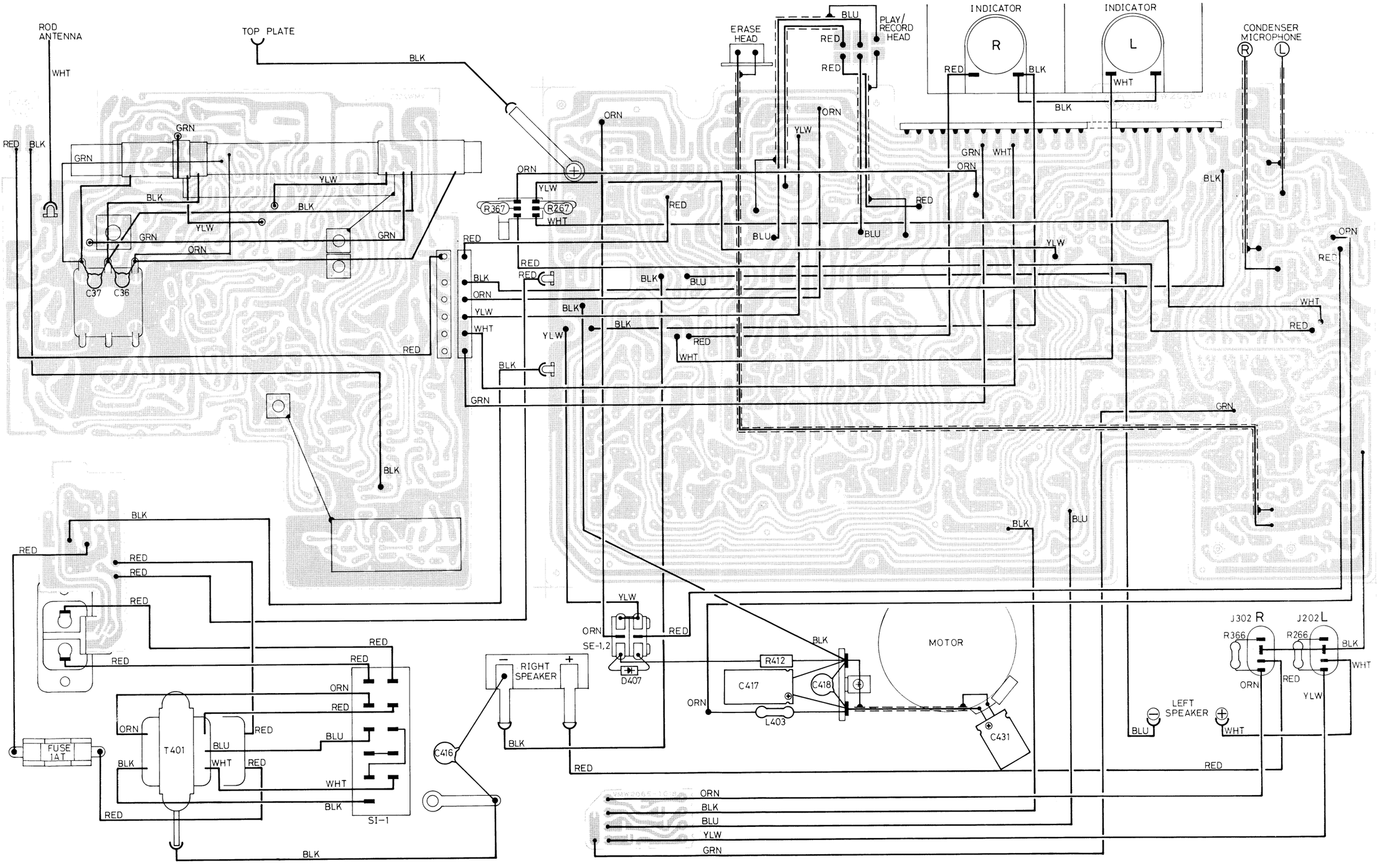
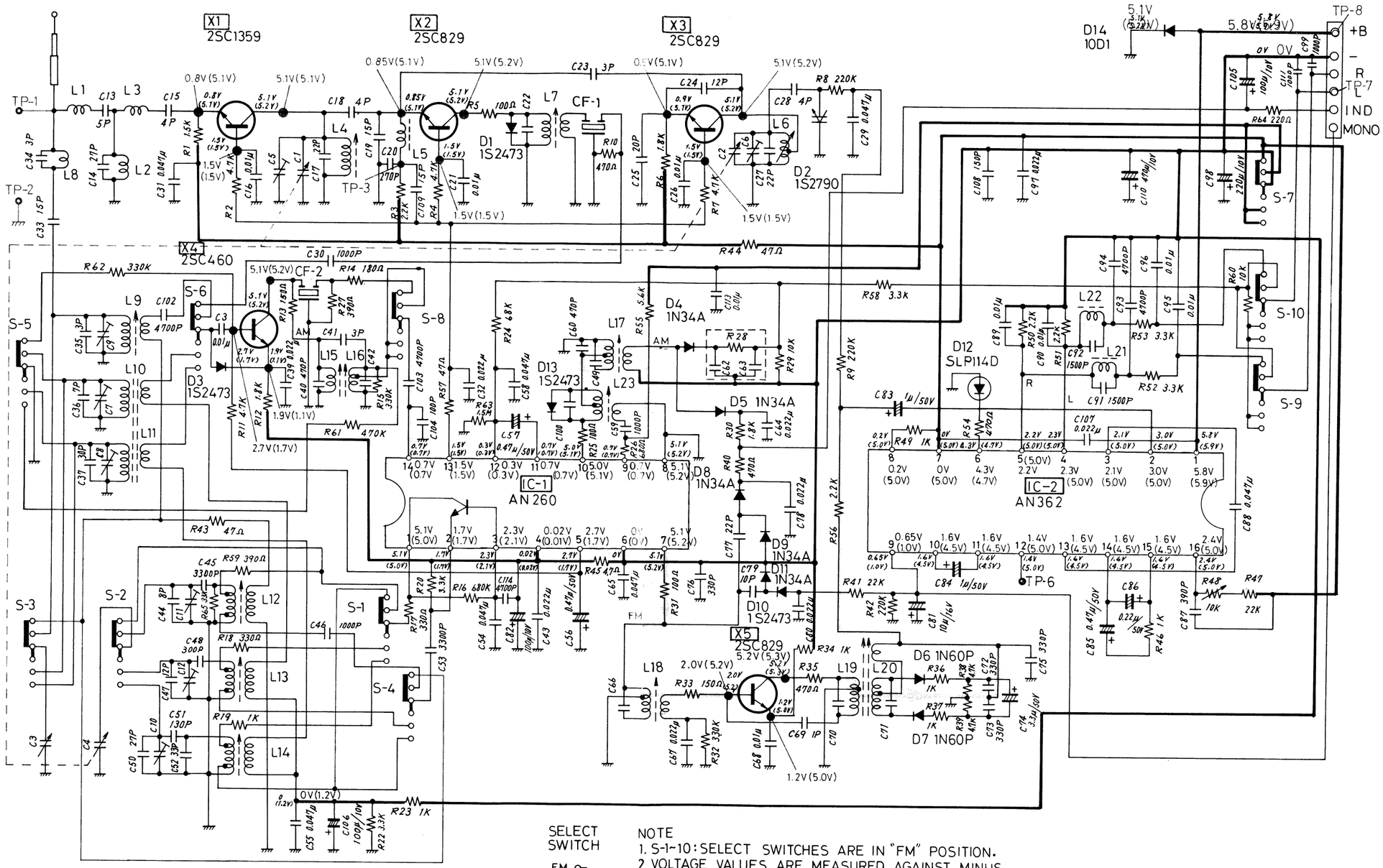


Fig. 33

Schematic Diagram of RC-717L,LB (Tuner)



NOTE: VOLTAGE VALUES ARE MEASURED WITH V.T.V.M. AT FM, IN PAR. VALUES AT MW.

NOTE
1. S-1~10: SELECT SWITCHES ARE IN "FM" POSITION.
2. VOLTAGE VALUES ARE MEASURED AGAINST MINUS POTENTIAL (−) USING V.T.V.M AT FM POSITION. ( ) VALUES ARE AT MW POSITION.
3. LAST NO. R65.C114

Fig. 34

Schematic Diagram of RC-717L (Amplifier)

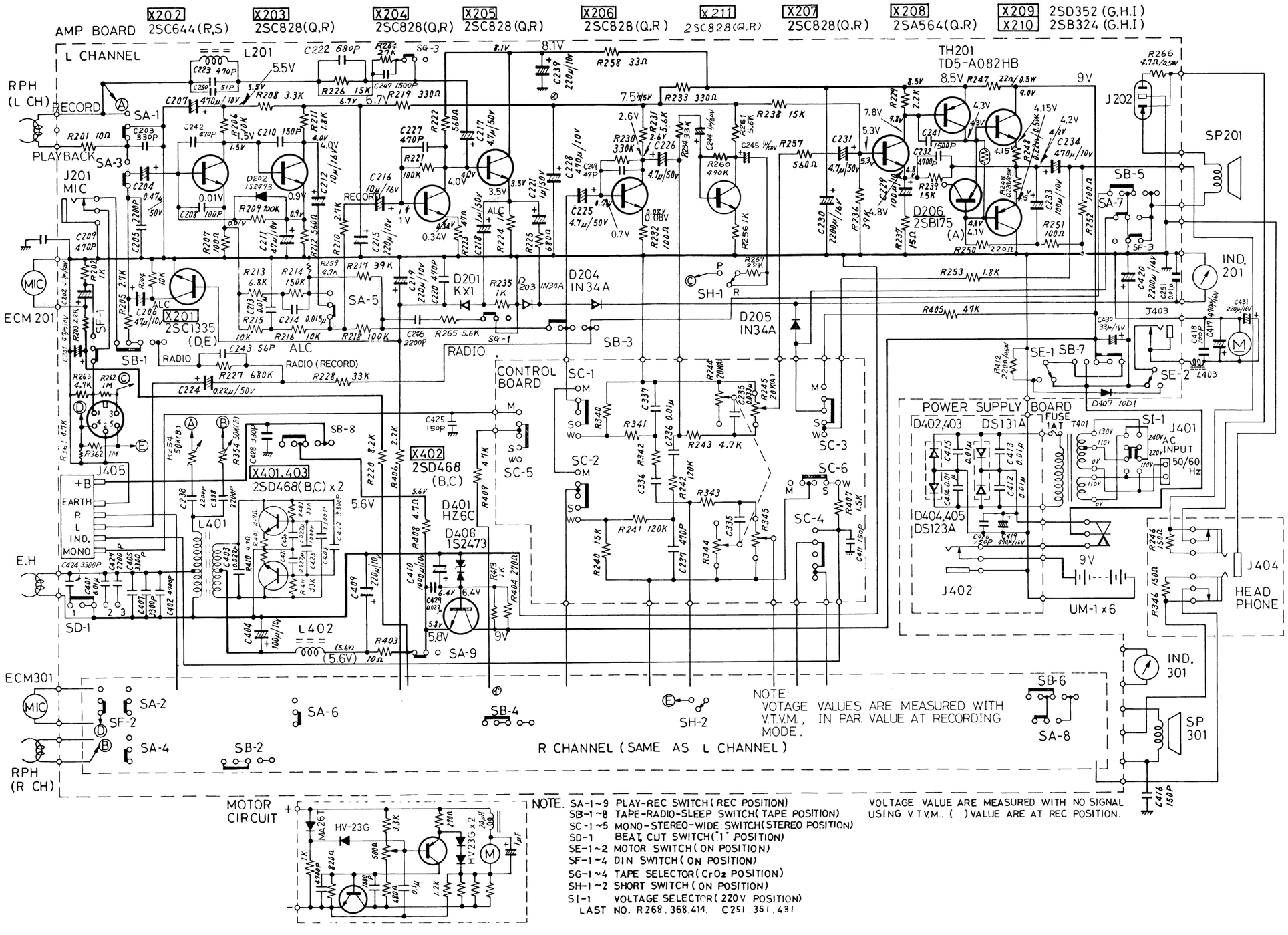


Fig. 35

Tuner Circuit Board Ass'y

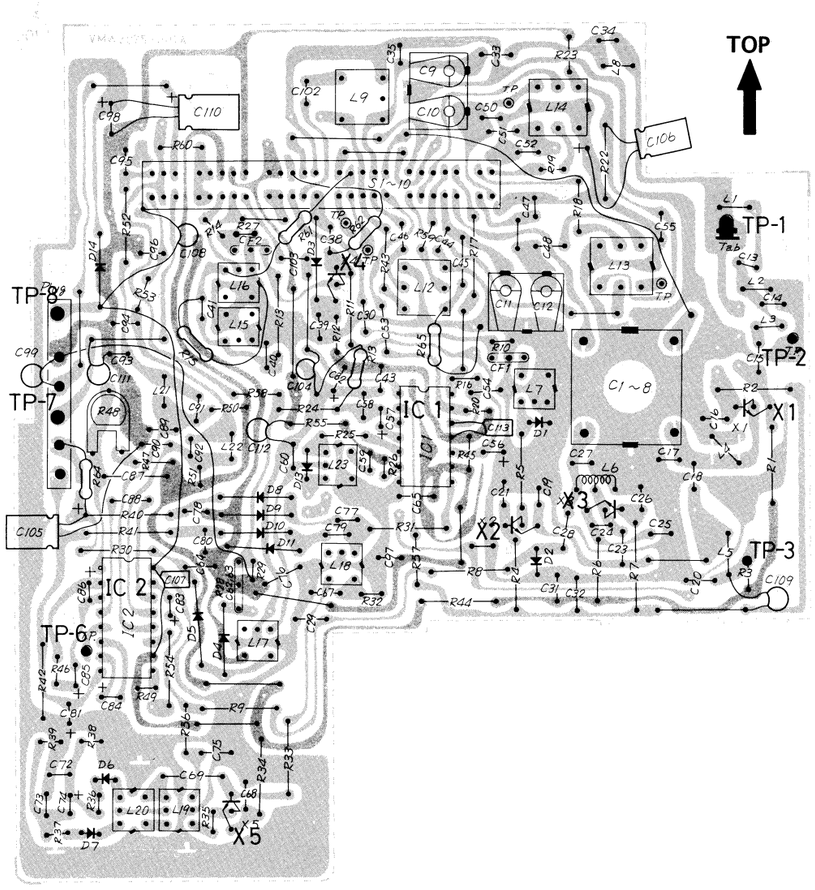


Fig. 36

Transistors

Ref. No.	Parts No.	Description	Pc	fT
X1, X2,3,5 X4	2SC1359(B) 2SC829(C) 2SC460(C)	Silicon (MATSUSHITA) " (") " (HITACHI)	0.25W " 0.2W	300MHz 230MHz "

ICs & Diodes

Ref. No.	Parts No.	Parts Name	Description
IC1	AN260	Integrated Circuit	MATSUSHITA (FM/AM IF)
IC2	AN362	"	" (MPX)
D1,3,10,13	1S2473	Silicon Diode	TOYO DENGU
D2	1S2790	Variable Capacitance Diode	HITACHI
D4,5	1N34A	Germanium Diode	"
D6,7	1N60P	"	"
D8,9,11	1N34A	"	"
D14	10D1	Silicon Diode	J.I.R.C.

Resistors

Ref. No.	Parts No.	Parts Name	Description
R1	QRD141K-152	Carbon	1.5kΩ 1/4W
R2,4,7,11	" -472	"	4.7kΩ "
R3	" -222	"	2.2kΩ "
R5	" -101	"	100Ω "
R6,12	QRD143K-182	"	1.8kΩ "
R8,9	QRD141K-224	"	220kΩ "
R10	QRD143K-471	"	470Ω "
R13	QRD141K-151	"	150Ω "
R14	QRD143K-181	"	180Ω "
R15	" -334	"	330kΩ "
R16	" -684	"	680kΩ "
R17	QRD141K-331	"	330Ω "
R18	QRD143K-331	"	" "
R19,23	" -102	"	1kΩ "
R20	" -332	"	3.3kΩ "
R22	QRD141K-332	"	" "
R24	QRD143K-683	"	68kΩ "
R25	" -101	"	100Ω "
R26	" -681	"	680Ω "
R27	" -391	"	390Ω "
R28	03126-15	CR Block	includes C62,63
R29	QRD143K-103	Carbon	10kΩ 1/4W
R30	QRD141K-182	"	1.8kΩ "
R31	" -101	"	100Ω "
R32	QRD143K-334	"	330kΩ "
R33	QRD141K-151	"	150Ω "
R34	" -102	"	1kΩ "
R35	QRD143K-471	"	470Ω "
R36,37,46,49	" -102	"	1kΩ "
R38,39	" -472	"	4.7kΩ "
R40,54	QRD141K-471	"	470Ω "
R41	" -223	"	22kΩ "
R42	" -224	"	220kΩ "
R43,57	QRD143K-470	"	47Ω "

Ref. No.	Parts No.	Parts Name	Description
R44	QRD141K-470	Carbon	4.7Ω 1/4W
R45	QRD143K-4R7	"	4.7Ω "
R47	" -223	"	22kΩ "
R48	QVP8A0B-014A	Variable	10kΩ B-curve
R50,51	QRD143K-222	Carbon	2.2kΩ 1/4W
R52	QRD141K-332	"	3.3kΩ "
R53,58	QRD143K-332	"	" "
R55	" -562	"	5.6kΩ "
R56	QRD141K-222	"	2.2kΩ "
R59	QRD143K-391	"	390Ω "
R60	" -103	"	10kΩ "
R61	QRD141K-474	"	470kΩ "
R62	QRD143K-334	"	330kΩ "
R63	" -155	"	1.5MΩ "
R64	" -221	"	220Ω "
R65	QRD143K-333	"	33kΩ "

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C1~8	QAP1224-504	Variable	
C9-10,11-12	QAT2002-001	Trimmer	
C13	QCS11HK-5R0	Ceramic	5pF 50V
C14	" -270	"	27pF "
C15,18,28	QCS11HJ-4R0	"	4pF "
C16,21,26	QCF11EZ-103	"	0.01μF 25V
C17	QCS11HK-220	"	22pF 50V
C19	" -150	"	15pF "
C20	" -271	"	270pF "
C23,34	QCS11HJ-3R0	"	3pF "
C24	" -120	"	12pF "
C25	QCS11HK-200	"	20pF "
C27	QCT05CH-220	"	22pF "
C29	QCF11EZ-473	"	0.047μF 25V
C30	QCY41HK-102	"	1000pF 50V
C31	QFM41HM-473	Mylar	0.047μF "
C32,39,43	" -223	"	0.022μF "
C33,47	QCS11HK-150	Ceramic	15pF "
C35,36,41	" -3R0	"	3pF "
C37	" -300	"	30pF "
C38	QFM41HM-103	Mylar	0.01μF "
C40	QCS11HK-471	Ceramic	470pF "
C44	" -100	"	10pF "
C45	QFS41HJ-332	Polystyrol	3300pF "
C46,59	QCY41HK-102	Ceramic	1000pF "
C48	QCS11HK-301	"	300pF "
C50	" -270	"	27pF "
C51	" -131	"	130pF "
C52	" -330	"	33pF "
C53	QCY41HK-332	"	3300pF "
C54	QFM41HM-473	Mylar	0.047μF "
C55,58,65	QCF11EZ-473	Ceramic	" 25V
C56,57	QEW41HA-474	Electrolytic	0.47μF 50V
C60	QCS11HK-471	Ceramic	470pF "
C62,63	03126-15	CR Block	includes R28
C64,67	QCF11EZ-223	Ceramic	0.022μF 25V
C68	"	"	0.01μF "

Ref. No.	Parts No.	Parts Name	Description
C69	QCS11HK-1R0	Ceramic	1pF 50V
C72,73,75,76	" -331	"	330pF "
C74	QEW41HA-335	Electrolytic	3.3μF "
C77	QCS11HK-220	Ceramic	22pF "
C78,80	QCF11EZ-223	"	0.022μF 25V
C79	QCS11HK-100	"	10pF 50V
C81	QEW41CA-106	Electrolytic	10μF 16V
C82	QEW41AA-107	"	100μF 10V
C83,84	QEW41HA-105	"	1μF 50V
C85	" -474	"	0.47μF "
C86	QEC81HM-224	"	0.22μF "
C87	QFS21HJ-391	Polystyrol	390pF "
C88	QFM41HM-473	Mylar	0.047μF "
C89,90,95,96	" -103	"	0.01μF "
C91,92	QCY41HK-152	Ceramic	1500pF "
C93,94	" -472	"	4700pF "
C97,107	QFM41HM-223	Mylar	0.022μF "
C98	QEW41AA-477D11	Electrolytic	470μF 10V
C99	QCY41HK-102	Ceramic	1000pF 50V
C102,103	" -472	"	4700pF "
C104	QCS11HK-101	"	100pF "
C105,106	QEW41AA-107	Electrolytic	100μF 10V
C108	QCS11HK-151	Ceramic	150pF 50V
C109	" -150	"	15pF "
C110	QEW41AA-477D11	Electrolytic	470μF 10V
C111	QCY41HK-102	Ceramic	1000pF 50V
C112	QCF11EZ-103	"	0.01μF 25V
C113	QFM41HM-472	Mylar	4700pF 50V

Others

Ref. No.	Parts No.	Parts Name	Description
L1,3	V03047-21	Coil	FM Antenna
L2	" -10	"	" "
L4	V03105-018	"	" RF
L5	03226-1K	Inductor	" IF trap
L6	V03080-015	Coil	" Osc.
L7	VQT7F12-103	I.F.T	FM
L8	V03047-11	Coil	SW Antenna
L9	VQR1001-202	"	" "
L12	V03101-025	"	" Osc.
L13	VQM1T03-201	"	MW Osc.
L14	VQL1T03-201	"	LW "
L15	VQT7A10-101	I.F.T.	AM
L16	VQT7A11-101	"	"
L17	" -302	"	"
L18	V03068-23	"	FM
L19	VQT7F15-502	"	"
L20	VQT7F16-602	"	"
L21,22	03226-18	Inductor	
L23	VQT7F11-202	I.F.T.	FM
CF1,2	V03059-3	Ceramic Filter	
S1~10	QSS0023-001	Slide Switch	Band Select
Plug	QMC0629-001	Plug Ass'y	6-pin
Tab	V43895-1	Tab	
T.P.	V04041-1	Test Point	

Amplifier Circuit Board Ass'y

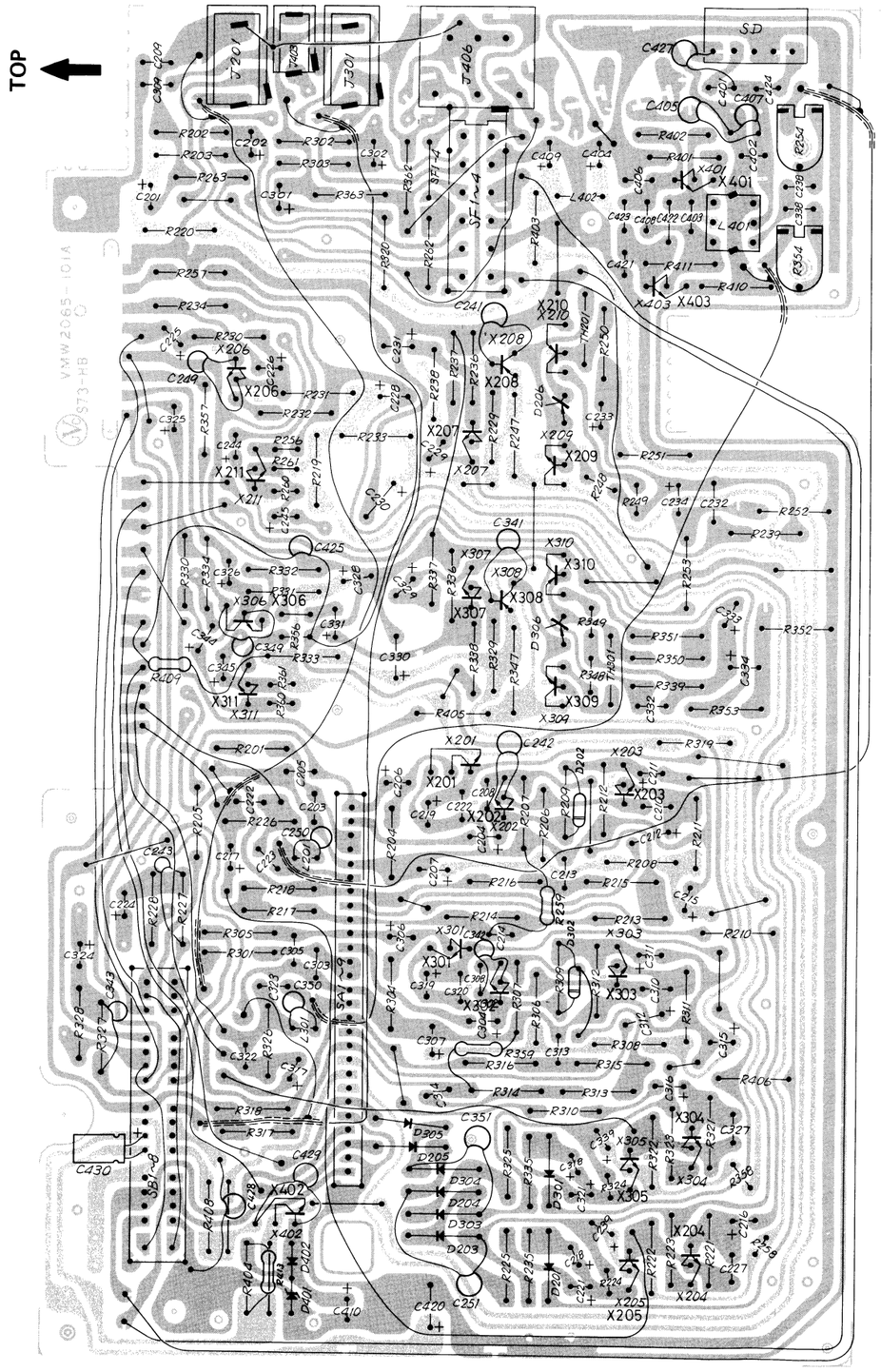


Fig. 37

Transistors

Ref. No.	Parts No.	Description	Pc	fT
X201,301	2SC1335(D,E)	Silicon (HITACHI)	0.2W	230MHz
X202,302	2SC644(R,S)	" (MATSUSHITA)	0.15W	
X203~207	2SC828(Q,R)	" (")	0.25W	220MHz
303~307				
X208,308	2SA564(Q,R)	Silicon (MATSUSHITA)	0.25W	80MHz
X209,309	2SD352(G,H,I)	Germanium (MATSUSHITA)	0.65W	
X210,310	2SB324(G,H,I)	" (")	"	
X211,311	2SC828(Q,R)	Silicon (MATSUSHITA)	0.25W	220MHz
X401,402,403	2SD468(B,C)	" (HITACHI)	0.9W	190MHz

Diodes & Thermisters

Ref. No.	Parts No.	Parts Name	Description
D201,202,301,302	1S2473	Silicon Diode	TOYO DENGU
D203~205	1N34A	Germanium Diode	HITACHI
303~305			
D206,306	2SB175(A)	Termanium Transistor	MATSUSHITA
D401	HZ6C	Zener Diode	HITACHI
D406	1S2473	Silicon Diode	TOYO DENGU
TH201,301	TD5-A082HB	Thermister	"

Resistors

Ref. No.	Parts No.	Parts Name	Description	
R201,301	QRD141K-100Y	Carbon	10Ω	1/4W
R202,302	" -102Y	"	1kΩ	"
R203,303	" -222Y	"	2.2kΩ	"
R204,206,304,306	" -103Y	"	10kΩ	"
R205,210,305,310	" -272Y	"	2.7kΩ	"
R207,307	" -101Y	"	100Ω	"
R208,308	" -332Y	"	3.3kΩ	"
R209,309	" -104Y	"	100kΩ	"
R211,311	" -182Y	"	1.8kΩ	"
R212,222,312,322	" -561Y	"	560Ω	"
R213,313	" -682Y	"	6.8kΩ	"
R214,314	" -154Y	"	150kΩ	"
R215,216,315,316	" -103Y	"	10kΩ	"
R217,317	" -393Y	"	39kΩ	"
R218,318	" -104Y	"	100kΩ	"
R219,319	" -331Y	"	330Ω	"
R220,320	" -822Y	"	8.2kΩ	"
R221,321	" -104Y	"	100kΩ	"
R223,323	" -470Y	"	47Ω	"
R224,324	QRD143K-102	"	1kΩ	"
R225,325	QRD141K-681Y	"	680Ω	"
R226,238,326,338	" -153Y	"	15kΩ	"
R227,327	" -684Y	"	680kΩ	"
R228,234,328,334	" -333Y	"	33kΩ	"
R229,329	" -222Y	"	2.2kΩ	"
R230,330	" -334Y	"	330kΩ	"
R231,331	" -562Y	"	5.6kΩ	"
R232,332	" -101Y	"	100Ω	"
R233,333	" -331Y	"	330Ω	"
R235,335	" -102Y	"	1kΩ	"
R236,336	" -393Y	"	39kΩ	"
R237,337	" -150Y	"	15Ω	"
R239,339	" -152Y	"	1.5kΩ	"
R247,347	QRC121K-220	Composition	22Ω	1/2W
R248,249,348,349	QRW123K-R22	Wire Wound	0.22Ω	"

Ref. No.	Parts No.	Parts Name	Description
R250,350	QRD141K-221Y	Carbon	220Ω 1/4W
R251,252,351,352	" -101Y	"	100Ω "
R253,353	" -182Y	"	1.8kΩ "
R254,354	QVP8A0B-054A	Variable	50kΩ B-curve
R256,356	QRD143K-102	Carbon	1kΩ 1/4W
R257,357	QRD141K-561Y	"	560Ω "
R258,358	QRD143K-330	"	33Ω "
R259,359	QRD141K-472	"	4.7kΩ "
R260,360	QRD143K-474	"	470kΩ "
R261,361	" -562	"	5.6kΩ "
R262,362	QRD141K-105Y	"	1MΩ "
R263,363	" -472Y	"	4.7kΩ "
R266,366	QRD121J-4R7	"	4.7Ω 1/2W
R268,368	QRD143K-103	"	10kΩ "
R401,408,410	QRD141K-4R7Y	"	4.7Ω "
R402,411	" -333Y	"	33kΩ "
R403	" -100Y	"	10Ω "
R404	" -221Y	"	220Ω "
R405	" -473Y	"	47kΩ "
R406	" -222Y	"	2.2kΩ "
R409	" -473	"	47kΩ "
R413	" -102	"	1kΩ "

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C201,206,301,306	QEW41AA-476	Electrolytic	47μF 10V
C202,217,302,317	QEW41HA-475	"	4.7μF 50V
C203,303	QCS11HK-331	Ceramic	330pF "
C204,304	QEW41HA-474	Electrolytic	0.47μF "
C205,305	QCY41HK-222	Ceramic	2200pF "
C207,307	QEW41AA-477D11	Electrolytic	470μF 10V
C208,308	QCS11HK-101	Ceramic	100pF 50V
C209,309	" -471	"	470pF "
C210,310	" -151	"	150pF "
C211,311	QEW41AA-476	Electrolytic	47μF 10V
C212,216,312,316	QEW41CA-106	"	10μF 16V
C213,313	QFM41HK-103	Mylar	0.01μF 50V
C214,314	" -153	"	0.015μF "
C215,219,315,319	QEW41AA-227D09	Electrolytic	270μF 10V
C218,221,318,321	QEW41HA-105	"	1μF 50V
C220,223,320,323	QCS11HK-471	Ceramic	470pF "
C222,322	QCS11HJ-681	"	680pF "
C224,324	QEC81HM-224	Electrolytic	0.22μF "
C225,226,325,326	QEW41HA-475	"	4.7μF "
C227,327	QCS11HK-471	Ceramic	470pF "
C228,234,328,334	QEW41AA-477D11	Electrolytic	470μF 10V
C229,233,329,333	" -107	"	100μF "
C230,330	QEW41CA-228	"	2200μF 16V
C231,331	QEW41HA-475	"	4.7μF 50V
C232,332	QCY41HK-472	Ceramic	4700pF "
C238,338	" -222	"	2200pF "
C239,339	QEW41AA-227D09	Electrolytic	220μF 10V
C241,341	QCY41HK-152	Ceramic	1500pF 50V
C242,342	QCS11HK-471	"	470pF "
C243,343	" -560	"	56pF "

Ref. No.	Parts No.	Parts Name	Description
C244,245,344,345	QEW41HA-105	Electrolytic	1μF 50V
C249,349	QCS11HK-470	Ceramic	47pF "
C250,350	QCS11HJ-510	"	51pF "
C251,351	QCF11EZ-103	"	0.01μF 25V
C401	QCY41HK-103	"	0.01μF 50V
C402	QFM41HM-472	Mylar	4700pF "
C403,406	" -223	"	0.022μF "
C404	QEW41AA-107	Electrolytic	100μF 10V
C405,407,408	QCY41HK-332	Ceramic	3300pF 50V
C409	QEW41AA-227D09	Electrolytic	220μF 10V
C410	" -108	"	1000μF "
C420	QEW41CA-228	"	2200μF 16V
C421	QFM41HK-223	Mylar	0.022μF 50V
C422,424	QCY41HK-332	Cermic	3300pF "
C423	" -102	"	1000pF "
C425	QCS11HK-151	"	150pF "
C427	QCY41HK-222	"	2200pF "
C428	QCS11HK-331	"	330pF "
C429	QCF11EZ-223	"	0.022μF 25V
C430	QEW41CA-336	Electrolytic	33μF 16V

Others

Ref. No.	Parts No.	Parts Name	Description
L201,301	03226-17	Inductor	
L401	V03083-019	Coil	Bias Osc.
L402	03226-2	Inductor	
SA1~9	QSS9201-001A	Slide Switch	Play/Record
SB1~8	QSS8301-001	"	Function
SF1~4	QSP4210-061	Push Switch	DIN
J201,202,301,302 403,SD1	V03104-057	Jack Board Ass'y	
J406	QMC9014-005	DIN Socket Ass'y	
Tab	V43895-1	Tab	
Clamp	V44691-001	Wire Clamp	

Exploded View of Cassette Mechanism

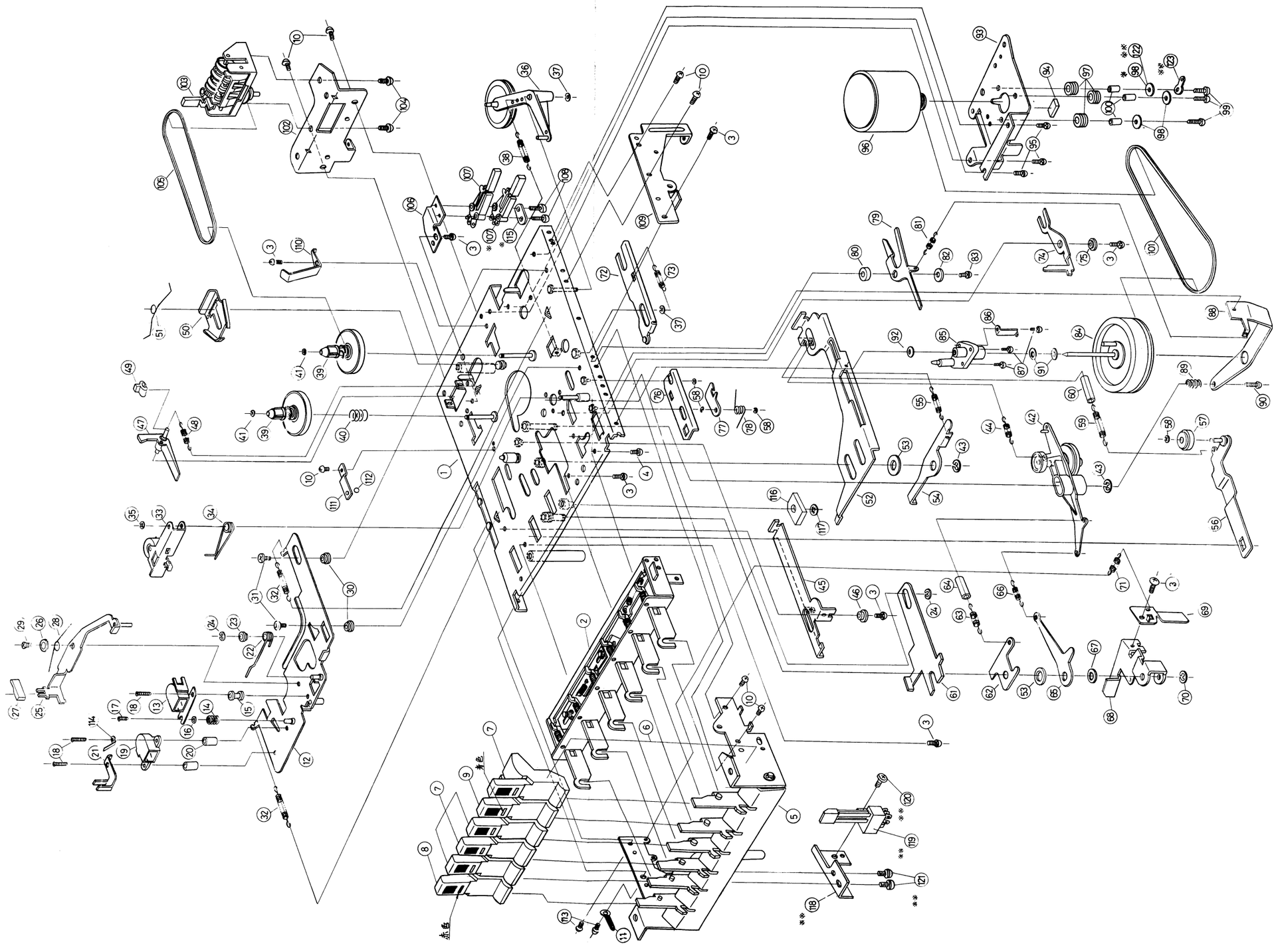


Fig. 38

List of Cassette Mechanism

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*9700181ZT	Chassis Ass'y		1
2	*9700291ZT	Push Button Switch Ass'y		1
3	LPSP2605Z	Ass'y Screw		8
4	SPSP2606Z	Screw		1
5	*9700292ZT	Frame Holder Ass'y		1
6	*9700271ZT	Knob & Frame Composite Ass'y		1
7	*V31127-001	Cassette Knob		4
8	*V31127-002	Cassette Knob	RECORD	1
9	*V31127-003	Cassette Knob	STOP	1
10	SPSD2604Z	TH. Tap Screw		7
11	4660901T	Wire Clamp		1
12	*9700481ZT	Head Panel Ass'y		1
13	*V03078-048	R/P Head		1
14	480408T	Spring		1
15	*9700401T	R/P Head Collar		1
16	WNS2000Z	Washer		1
17	*SPSX2006Z	Screw		1
18	SPSP2011Z	Screw		3
19	*V03078-049	Erase Head		1
20	*4630402T	Erase Head Collar		2
21	4080430T	Wire Clamp		1
22	*9700405T	RQ-Spring		1
23	4080412T	Collar		1
24	REE2500	E-Ring		2
25	4080482ZT	Stop Detect Lever Ass'y		1
26	4080414T	Collar		1
27	4531301T	Stop Detect Contact		1
28	4080415T	Spring		1
29	SSSP2005Z	Screw		1
30	4080411T	Collar		2
31	SDSP2604Z	Screw		2
32	4080413T	Spring		2
33	7150781ZT	Pinch Roller Ass'y		1
34	4080503T	Pinch Roller Spring		1
35	REE1900	E-Ring		1
36	*9700791ZT	Clutch Ass'y		1
37	REE2000	E-Ring		2
38	2380406T	Spring		1
39	5720695ZT	Reel Disk Ass'y		2
40	040508T	Spring		1
41	REE1200	E-Ring		2
42	82008ZT	FF Idler Ass'y		1
43	REE4000	E-Ring		2
44	581316T	Spring		1
45	4080301T	Record Slide Lever		1
46	030304T	Collar		1
47	2680503T	Record Safety Lever		1
48	1320303T	Spring		1
49	2680515T	Stopper		1
50	4080901T	Brake Arm		1
51	8200902T	Spring		1
52	4080903T	Brake Function Plate		1
53	110505T	Special Washer		2
54	4080807T	RQ-Lever		1
55	4080811T	Spring		1
56	*9701081ZT	Rewind Idler Arm Ass'y		1
57	2110902T	Rewind Idler		1

Ref. No.	Parts No.	Parts Name	Description	Q'ty
58	REE1500	E-Ring		4
59	020905BT	Spring		1
60	———	Tube	ϕ3xϕ4xL24	1
61	4080806T	RQ-Function Plate		1
62	4080805T	Rewind Function Plate		1
63	4080812T	Spring		1
64	———	Tube	ϕ4.5xϕ5.5xL10	1
65	4080804T	FF Function Plate		1
66	4080810T	Spring		1
67	1510305T	Special Washer		1
68	8200303T	Record Lever		1
69	*9700303T	Record Spring Plate		1
70	REE3200	E-Ring		1
71	580301T	Spring		1
72	4081581ZT	Slide Lever Ass'y		1
73	4081510T	Spring		1
74	4081503T	Pinch Roller Arm Lever		1
75	2381304T	Collar		1
76	5581681ZT	Pause Slide Lever Ass'y		1
77	8291401T	Pause Lever		1
78	5421803T	Pause Lever Spring		1
79	4081405T	Auto Stop Lever		1
80	4081402T	Collar		1
81	020708T	Spring		1
82	WNS2600Z	Washer		1
83	LPSP2607Z	Ass'y Screw		1
84	580903ZT	Flywheel Ass'y		1
85	3690701T	FL. Block		1
86	4460701T	Earth Plate		1
87	LPSP2005Z	Ass'y Screw		3
88	4081195ZT	Flywheel Bracket Ass'y		1
89	060405T	Spring		1
90	SPSP2610Z	Screw		1
91	031504T	Special Washer		2
92	031503T	Special Washer		1
93	*9701201T	Motor Bracket		1
94	3130702T	Mat		1
95	LPSP2604Z	Ass'y Screw		3
96	MHi5F9CL	Motor		1
97	T45687-001	Rubber Cushion		3
98	031501T	Washer		2
99	SPSP2607Z	Screw		3
100	4081211T	Motor Collar		3
101	6241201T	Main Belt		1
102	*9701701T	Counter Bracket		1
103	*V31093-002	Tape Counter		1
104	SPSP3005ZS	Screw		2
105	8001602T	Counter Belt		1
106	8201801T	Switch Bracket		1
107	6251804T	Main Switch	V44737-001	2
108	SPSP2014Z	Screw		2
109	*9701601T	Bracket		1
110	*9700103T	Pack Spring		1
111	*8780404ZT	Spring Plate		1
112	*020404T	Steel Ball	ϕ3	1
113	SPSD2606Z	TH. Tap. Screw		2
114	031307T	Wire Clamp		1

— Continued on page 29 —

Control Circuit Board Ass'y

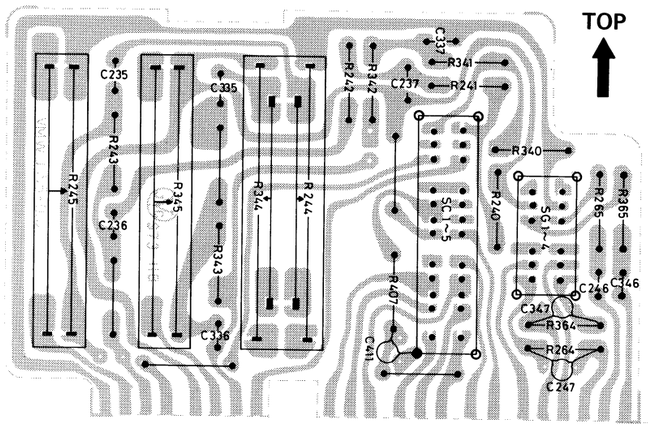


Fig. 39

Switches

Ref. No.	Parts No.	Parts Name	Description
SC 1 ~ 5	QSL6336-001	Slide	MODE/METER
SG 1 ~ 4	QSL4218-001	"	TAPE

Resistors

Ref. No.	Parts No.	Parts Name	Description
R240, 340	QRD141K-153	Carbon	15kΩ ¼W
R241, 341	" -124	"	120kΩ "
R242, 342	" -124	"	" "
R243, 343	" -472	"	4.7kΩ "
R244, 344	QVT1AFA-024A	Variable (Slide)	20kΩ, A-curve
R245, 345	QVT3AFA-024	" (")	" "
R264, 364	QRD141K-273	Carbon	27kΩ ¼W
R265, 365	" -562	"	5.6kΩ "
R407	" -152	"	1.5kΩ "

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C235, 335	QFM41HM-333	Mylar	0.033μF 50V
C236, 336	" -103	"	0.01μF "
C237, 337	QCS11HK-471	Ceramic	470pF "
C246, 346	QCY41HK-222	"	2200pF "
C247, 347	" -152	"	1500pF "
C411	QCS11HK-151	"	150pF

Headphone Circuit Board Ass'y

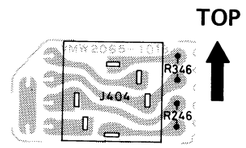


Fig. 40

Resistors

Ref. No.	Parts No.	Parts Name	Description
R246, 346	QRD143K-151	Carbon	150Ω ¼W

Other

Ref. No.	Parts No.	Parts Name	Description
J404	QMS6301-008	Headphone Jack Ass'y	

LED Circuit Board Ass'y

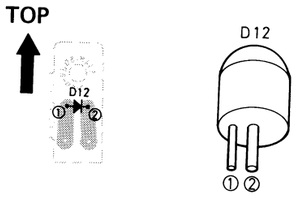


Fig. 41

Diode

Ref. No.	Parts No.	Parts Name	Description
D12	SLP114D	Light Emission (SANYO)	Red

Exploded View of Power Supply Ass'y

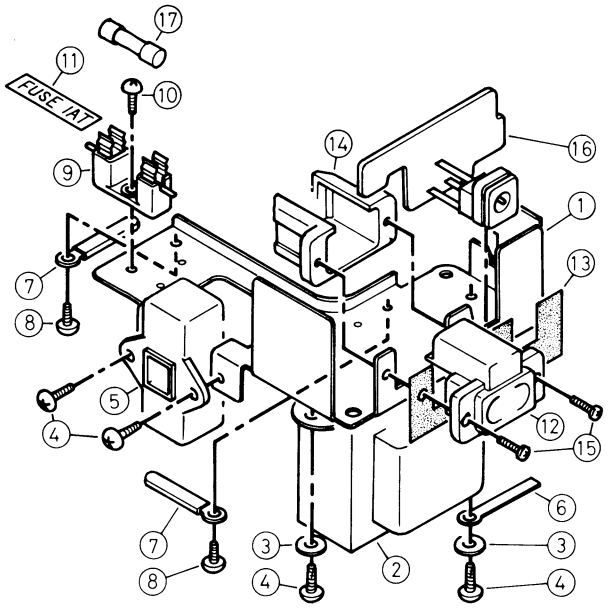


Fig. 42

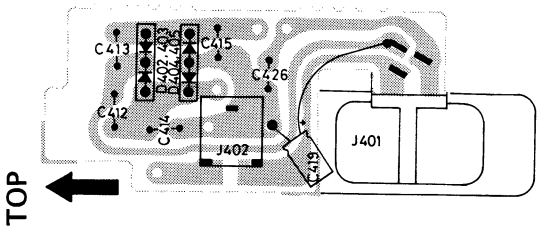


Fig. 43

Asterisked parts (*) show new parts

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	*V31152-003	AC Bracket		1
2	VTP48N2-90B	Power Transformer	T401	1
3	Q03091-138	Washer		2
4	SBSB3008Z	Screw		4
5	QSS2325-005	Slide Switch	SI-1	1
6	V42603-2	Wire Clamp		1
7	V42603-003	"		2
8	SBSB2608Z	Screw		2
9	QMG1321-002	Fuse Holder Ass'y		1
10	SBSB2608Z	Screw		2
11	V42816-007	Fuse Label	Sticker	1
12	QMC0263-001	AC Socket Ass'y	J401	1
13	V44896-001	Spacer		1
14	V44399-00D	Cap		1
15	SPSP2608Z	Screw		2
16	* ————	Circuit Board Ass'y	Power Supply	1
17	QMF51A2-1R0	Fuse	1AT	1

Diodes

Ref. No.	Parts No.	Parts Name	Description
D402, 403	DS131A	Silicon (SANYO)	Rectifier Stack
D404, 405	DS132A	" (")	"

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C412~415	QCF11EZ-103	Ceramic	0.01μF 25V
C419	QEW41CA-477	Electrolytic	470μF 16V
C426	QCS11HK-151	Ceramic	150pF 50V

Others

Ref. No.	Parts No.	Parts Name	Description
J401	QMC0263-001	AC Socket Ass'y	
J402	QMA0921-003	DC Jack Ass'y	

Exploded View of Tuner Ass'y

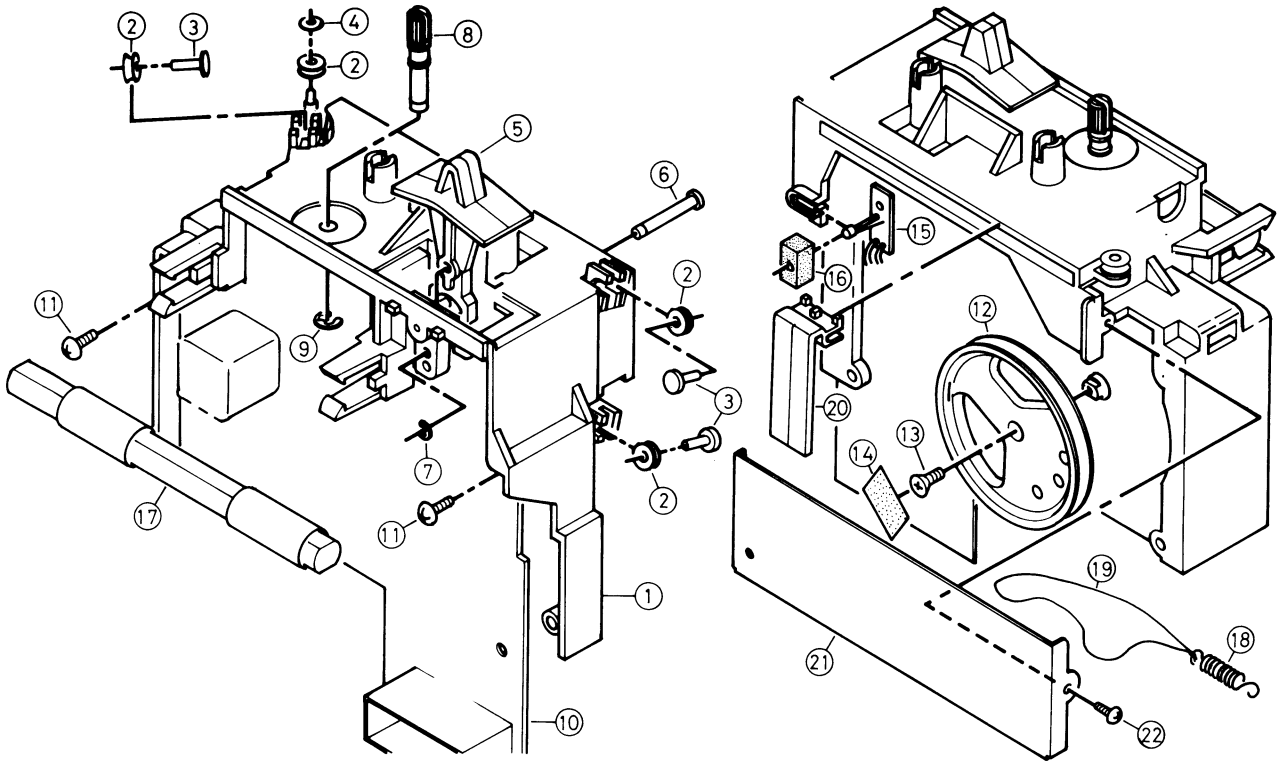


Fig. 44

Asterisked parts (*) show new parts

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	* V20693-001	Chassis Base		1
2	V40409-3	Roller		4
3	RTA3007	Rivet		3
4	V42562-1	Special Washer		1
5	* V44894-002	Toggle Lever		1
6	* V43202-009	Stud		1
7	REE2000	E-Ring		1
8	V41336-013	Tuning Shaft		1
9	REE3000	E-Ring		1
10	* ———	Circuit Board Ass'y	Tuner	1
11	SBSB3008Z	Screw		2
12	QZD1108-002	Dial Drum		1
13	SSSP2608Z	Screw		1
14	VYSA1R6-021	Spacer	Glued (Sticker)	1
15	* ———	Circuit Board Ass'y	LED	1
16	* V44901-001	Spacer		1
17	VQB012B-006	Bar Antenna Ass'y	L10, 11	1
18	50153-3	Spring		1
19	VHR2TT9-06A	Dial Cord	ϕ0.6 x 895 mm	1
20	* V44895-001	Needle		1
21	* V31133-002	Dial Scale		1
22	SBSB2606Z	Screw		1

Exploded View of Amplifier Ass'y

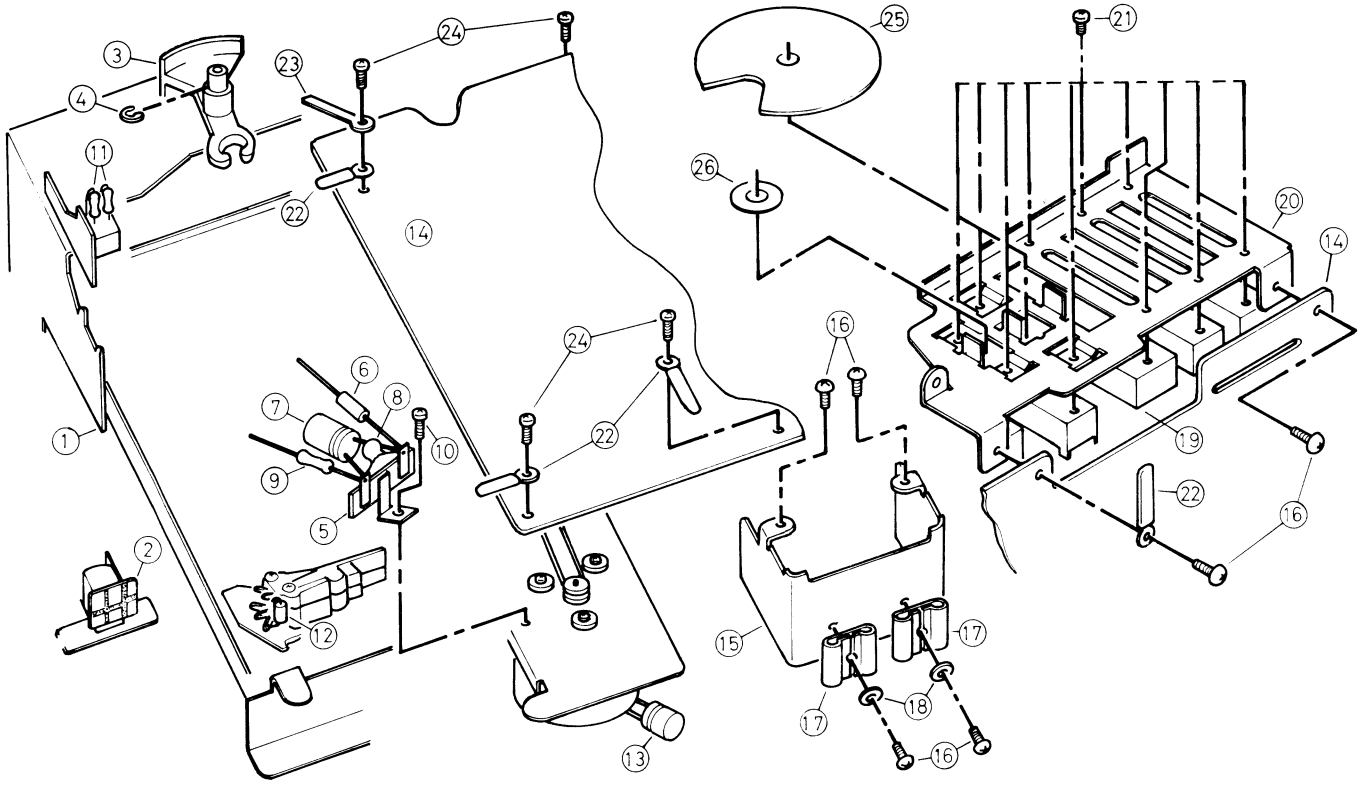


Fig. 45

Asterisked parts (*) show new parts

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	* ————	Cassette Mechanism Ass'y		1
2	*VMW3035-401	Printed Circuit Board	for play/record head	1
3	*V44897-001	Toggle Lever Body		1
4	REE5000	E-Ring		1
5	QML3030-033	Lug Strip Ass'y		1
6	QRC121K-221	Composition Resistor	R412 (220Ω, 1/2W)	1
7	QEW41CA-477	Electrolytic Capacitor	C417 (470μF, 16V)	1
8	QCS11HK-101	Ceramic Capacitor	C418 (100pF, 50V)	1
9	T41572-001	Choke Coil	L403	1
10	SPSP2606Z	Screw		1
11	QRD143K-223	Carbon Resistor	R267,367 (22kΩ, 1/4W)	2
12	10D1	Silicon Diode	D407 (J.I.R.C.)	1
13	QEW41CA-227	Electrolytic	C431 (220μF, 16V)	1
14	* ————	Circuit Board Ass'y	Amplifier	1
15	*V31139-002	Radiation Plate		1
16	SBSB3008Z	Screw		6
17	V41615-1	Radiation Plate		2
18	Q03091-105	Washer		2
19	* ————	Circuit Board Ass'y	Control	1
20	*V31134-001	Bracket		1
21	SPSP2604Z	Screw		10
22	V42603-003	Wire Clamp		4
23	" -2	"		1
24	SPSP2606Z	Screw		4
25	V45039-001	Dust Cover	MODE/METER	1
26	Q03094-154	Washer	TAPE	1

Exploded View of Front Cabinet

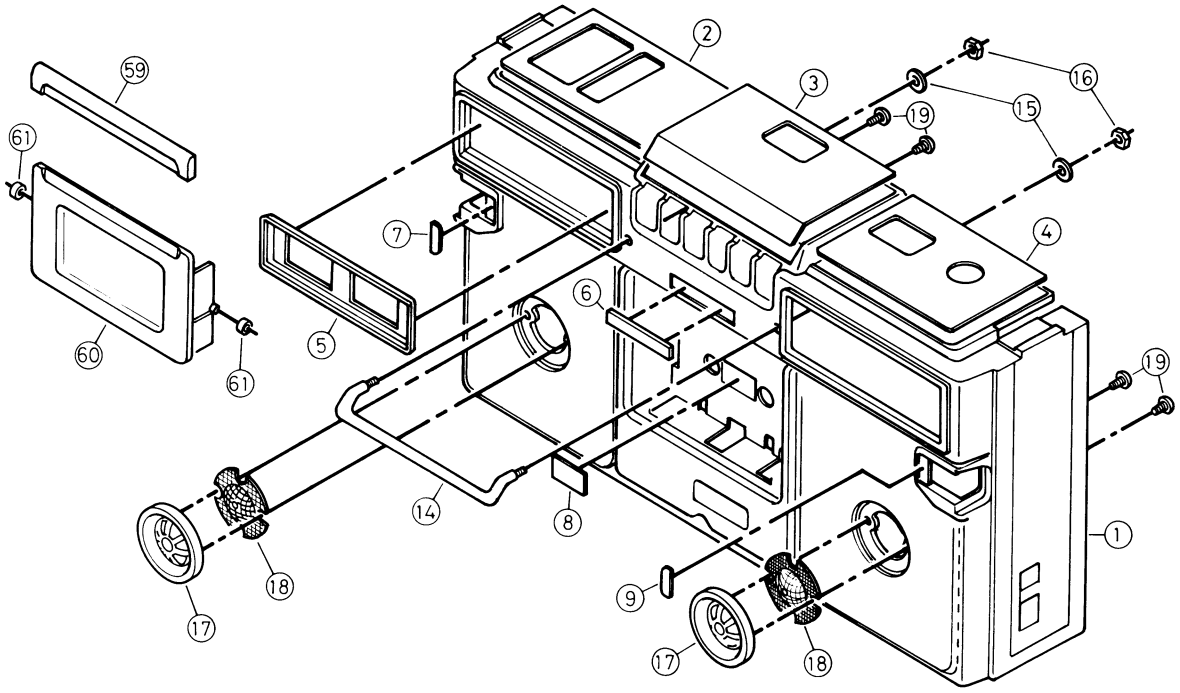


Fig. 46

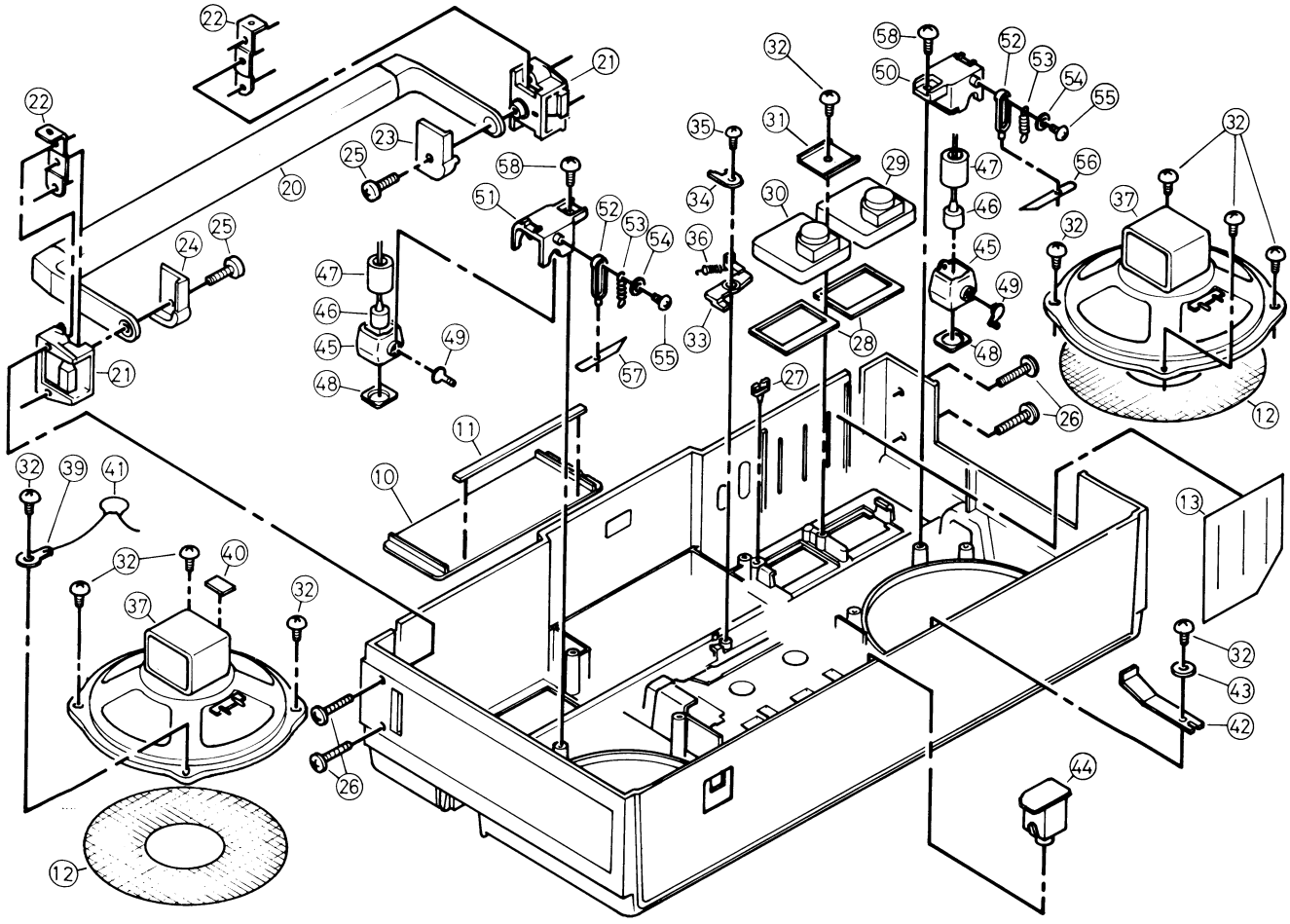


Fig. 47

Asterisked parts (*) show new parts

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1 ~ 13	* ZCRC717L-CBF	**Front Cabinet Ass'y**		1
1	* V10331-004	Front Cabinet		1
2	* V31128-002	Top Plate	Glued	1
3	* V31129-002	"	"	1
4	* V31130-002	"	"	1
5	* V44878-001	Meter Escutcheon	"	1
6	QXM2251-001	Mark	"	1
7	* V44879-003	Plate	"	1
8	V42616-2	"	"	1
9	* V44879-004	"	"	1
10	* V44877-001	Dial Lens	"	1
11	VYSA1R4-026	Spacer	Glued to Dial Lens	1
12	47115-047	Net	Heat-treated	2
13	* V44892-001	Dust Cover	Glued	1
14	* V44880-001	Protector		1
15	Q03091-138	Washer		2
16	NNB3000S	Nut		2
17	V44561-00A	Speaker Grill Escutcheon		2
18	V44564-001	Grill Net	Glued	2
19	SBSB2608Z	Screw		4
20	* V44348-00H	Handle		1
21	* V31131-001	Supporter		2
22	* V44883-001	Bracket		2
23	* V44881-001	Washer		1
24	* V44882-001	"		1
25	SPSP3014ZS	Screw		2
26	SDSP3018RS	"		4
27	V44691-001	Wire Clamp	Force-fitted	1
28	V43547-1	Indicator Rubber		2
29	V03020-053	Indicator		1
30	" -054	"		1
31	* V44893-001	Stopper		1
32	SBSB3008Z	Screw		10
33	* V31138-001	Hook Lever		1
34	* V44920-001	Hook Lever Washer		1
35	SBSB2608Z	Screw		1
36	50153-008	Spring		1
37	EAS12P89SE	Speaker		2
38			Blank No.	
39	50242-3	Terminal Lug		1
40	VYSR101-003	Spacer	Glued	1
41	QCS11HK-151	Ceramic Capacitor	C416 (150pF, 50V)	1
42	* V44772-002	Door Spring		1
43	Q03091-105	Washer		1
44	* ———	Circuit Board Ass'y	Headphone	1
45	* V44885-003	Microphone Case		2
46	VMME62N-004	Condenser Microphone		2
47	* V44886-001	Bushing		2
48	* V44884-002	Plate	Glued	2
49	* V44907-002	Arm		2
50	* V44890-001	Microphone Holder		1
51	* V44908-001	"		1
52	* V44887-00A	Microphone Lever		2
53	* V44921-001	Spring		2
54	Q03091-158	Washer		2
55	SBSB2606Z	Screw		2
56	* V44899-001	Blind		1
57	* " -002	"		1
58	SBSB3010Z	Screw		2
59	* V31136-001	Head Cover	Force-fitted	1
60	* V31135-00C	Cassette Case		1
61	V41405-004	Rubber Ring		2

Exploded View of Rear Cabinet

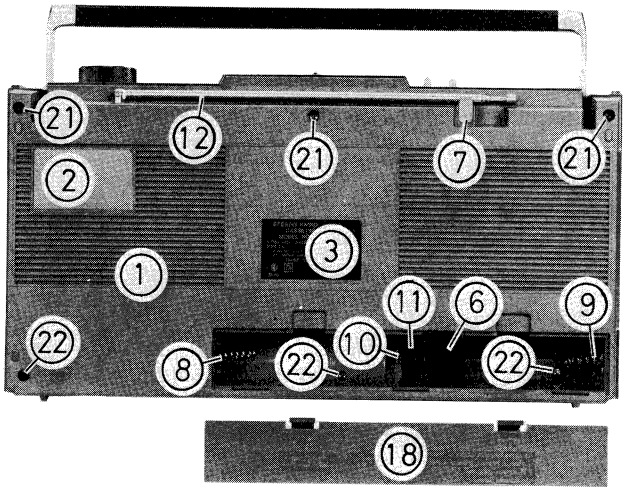


Fig. 48

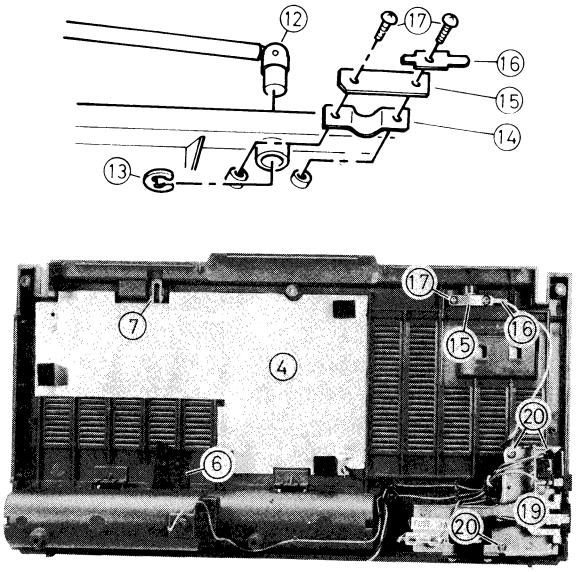


Fig. 49

Asterisked parts (*) show new parts

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1 ~ 6	* ZCRC717L-CBR	**Rear Cabinet Ass'y**		1
1	* V10332-002	Rear Cabinet		1
2	* V44852-003	Plate	Glued	1
3	* VYN5033-002CA	Name Plate	"	1
4	* V44905-00B	Shield	"	1
5			Blank No.	
6	V41583-007	Tape	Glued	1
7	V44618-001	Antenna Retainer	Force-fitted	1
8	53738-1	Spring	"	1
9	V43209-003	"	"	1
10	V42989-009	Contact		1
11	SBSB3008Z	Screw		1
12	QZR4234-001U	Rod Antenna		1
13	REE6000	E-Ring		1
14	V44195-002	Rod Antenna Holder		1
15	V44196-003	"		1
16	V41208-003	Tab		1
17	SBSB3008Z	Screw		2
18	* ZCRC717L-BCA	**Battery Cover Ass'y**		1
19	* ————	Power Supply Ass'y		1
20	SBSB3010Z	Screw		3
21	SDSP3020RS	"		3
22	SDSB3020R	"		3

Final Packing Ass'y

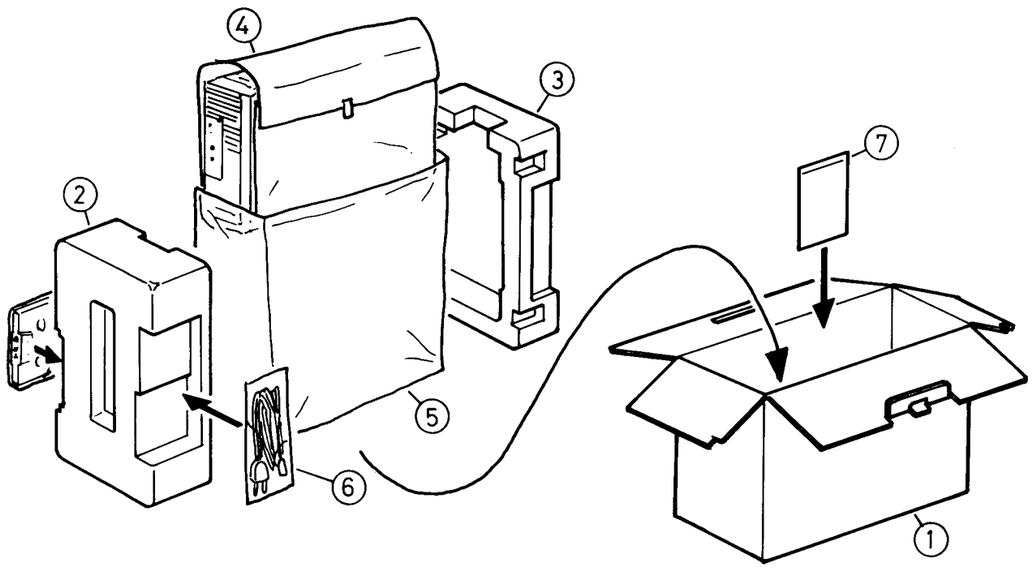


Fig. 50

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1	* VP2339-007	Carton Box		1
2	* VP1637-001	Side Cushion		1
3	* VP1636-001	"		1
4	VHPJ079-036	Wrapping Paper		1
5	QPGA060-05005	Cabinet Cover		1
6	QPGA012-02505	Bag (Polyethylen Film)	for Power Cord	1
7	QPGB024-03404	"	for Accessories	1

Accessories

Parts No.	Parts Name	Description	Q'ty
QMP3950-183	Power Cord		1
V04056-1	Shorting Plug	for Erasing	1
V43338-1	Head Cleaning Stick		2
VGT12S2-J02	Cassette Tape	Side A: Recorded, Side B: Blank	1
VNM0657-001	Instruction Book		2
VNC6301-001	Trouble Shooting Chart		1
MU-103E	Dynamic Microphone	Unidirectional (Option)	
HP-5K	Headphones	(Option)	
HM-200E	Binaural Headphone-Mikes	(Option)	
DCT-912K	Car Adaptor	12V → 6/9V (Option)	

— Continued from page 21 —

Ref. No.	Parts No.	Parts Name	Description	Q'ty
115	TFB338445-01	Plate		1
116	*9700106T	Rubber Sheet		1
117	RDS3000F	CS-Ring		1
118	*9701801T	Switch Bracket		1
119	*7841601T	Leaf Switch		1
120	SDSP2606Z	Screw		1
121	LPSP2606Z	Ass'y Screw		2
122	WNS2600Z	Washer		1
123	4081210T	Lug		1

Difference of Model RC-717LB

Difference between RC-717LB and RC-717L is the power supply section.
The former model is equipped with the fuse for primary circuit.

Wiring Connection

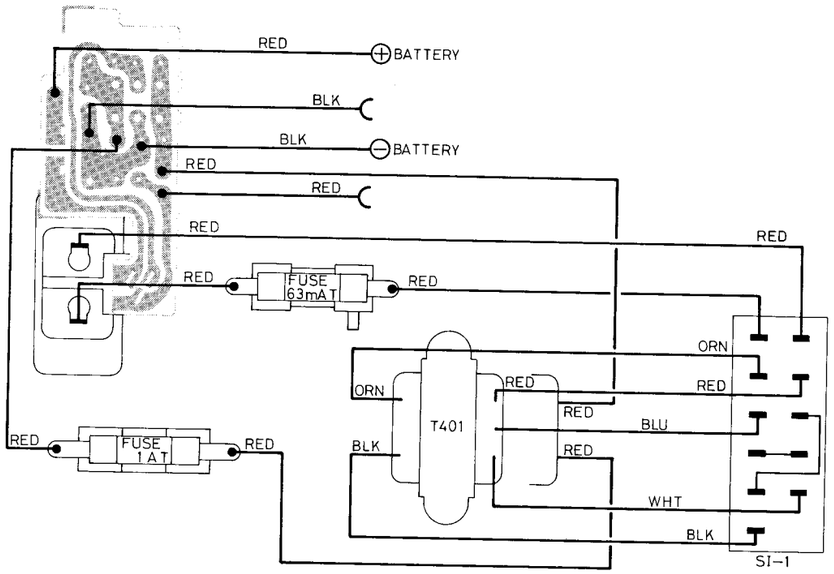


Fig. 51

Schematic Diagram of RC-717LB (Amplifier)

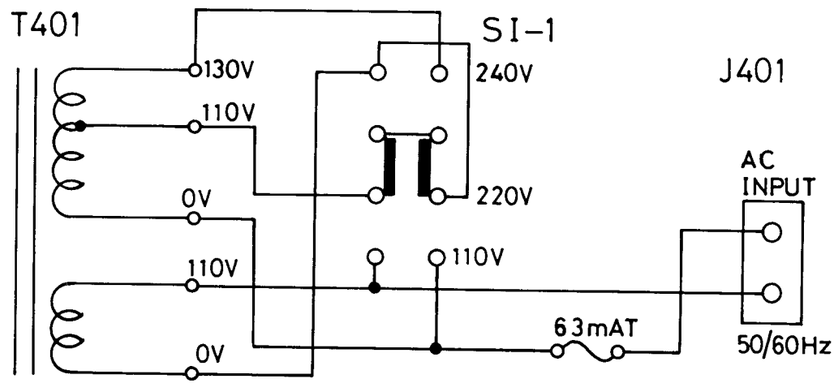


Fig. 52

Exploded View of Power Supply Ass'y

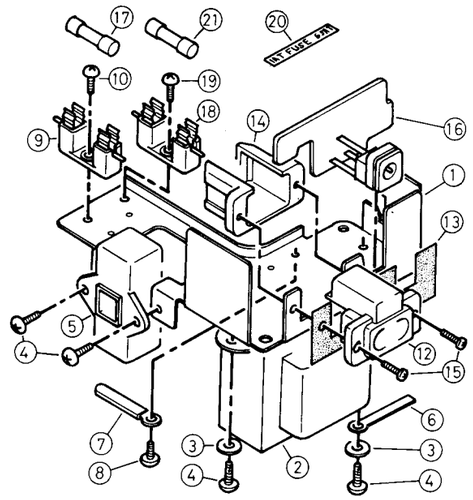


Fig. 53

Ref. No.	Parts No.	Parts Name	Description		Q'ty
1	V31152-003	AC Bracket			1
2	VTP48N2-90B	Power Transformer	T401	⚠	1
3	Q03091-138	Washer			2
4	SBSB3008Z	Screw			4
5	QSS2325-005	Slide Switch	SI-1	⚠	1
6	V42603-2	Wire Clamp			1
7	V42603-003	Wire Clamp			1
8	SBSB2608Z	Screw			1
9	QMG1321-002	Fuse Holder Ass'y		⚠	1
10	SBSB2608Z	Screw			1
11			Blank No.		
12	QMC0263-001	AC Socket Ass'y	J401	⚠	1
13	V44896-001	Spacer			1
14	V44399-00D	Cap		⚠	1
15	SPSP2608Z	Screw			2
16		Circuit Board Ass'y	Power Supply	⚠	1
17	QMF51A2-1R0	Fuse	1AT	⚠	1
18	QMG1321-001	Fuse Holder Ass'y		⚠	1
19	SBSB2608Z	Screw			1
20	V42816-010	Fuse Label	Sticker		1
21	QMF51A2-R063	Fuse	63mAT	⚠	1

Note: The parts marked ⚠ in the Description column are critical components for safety.
Use the specified parts, when changing the critical components, never use equivalent parts.

Exploded View of Rear Cabinet (Refer to Page 28)

Ref. No.	Parts No.	Parts Name	Description	Q'ty
1 ~ 6	* ZCRC717LB-CBR	Rear Cabinet Ass'y		1
3	* VYN5033-003CA	Name Plate	Glued	1

Accessories (Refer to Page 29)

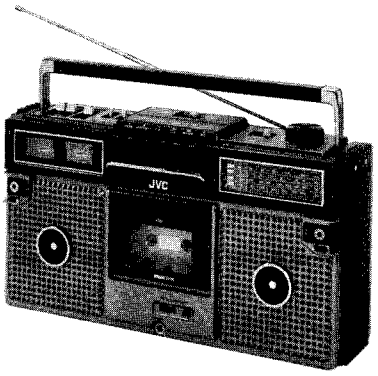
Parts No.	Parts Name	Description	Q'ty
QMP9017-006	Power Cord	⚠ (Critical Component)	1
QZL1002-003	Warning Label	⚠ (Critical Component)	1

JVC

Supplementary
SERVICE MANUAL

MODEL
RC-717L,LB

FM-LW-MW-SW
4-BAND RADIO
STEREO CASSETTE
RECORDER



Notice:
The tuner and amplifier circuit boards will be changed in the midway of production to mount the parts soldered on the copper side of circuit board on the component side.

No. 1332-B
May 1977

The circuit boards will be changed as follows.

RC-717L

Tuner Circuit Board
After serial No. 10260501

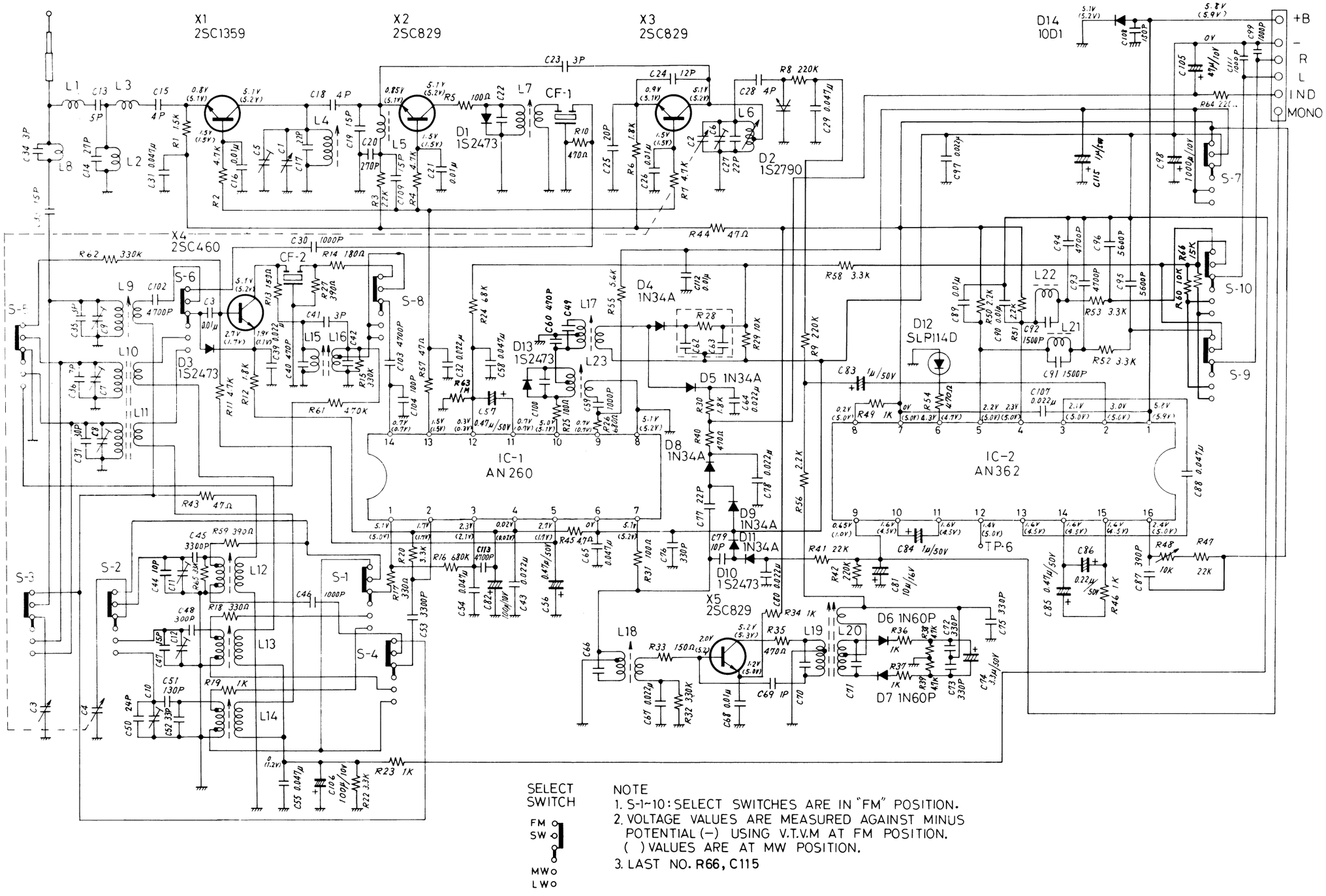
Amplifier Circuit Board
After serial No. 10260001 except serial Nos. between 11260501 and 11262000

RC-717LB

Tuner Circuit Board
From the first of production

Amplifier Circuit Board
After serial No. 11220001

Schematic Diagram of RC-717L,LB (Tuner)



NOTE
1. S-1~10 : SELECT SWITCHES ARE IN "FM" POSITION.
2. VOLTAGE VALUES ARE MEASURED AGAINST MINUS POTENTIAL (−) USING V.T.V.M AT FM POSITION.
( ) VALUES ARE AT MW POSITION.
3. LAST NO. R66, C115

Fig. 1

Tuner Circuit Board Ass'y

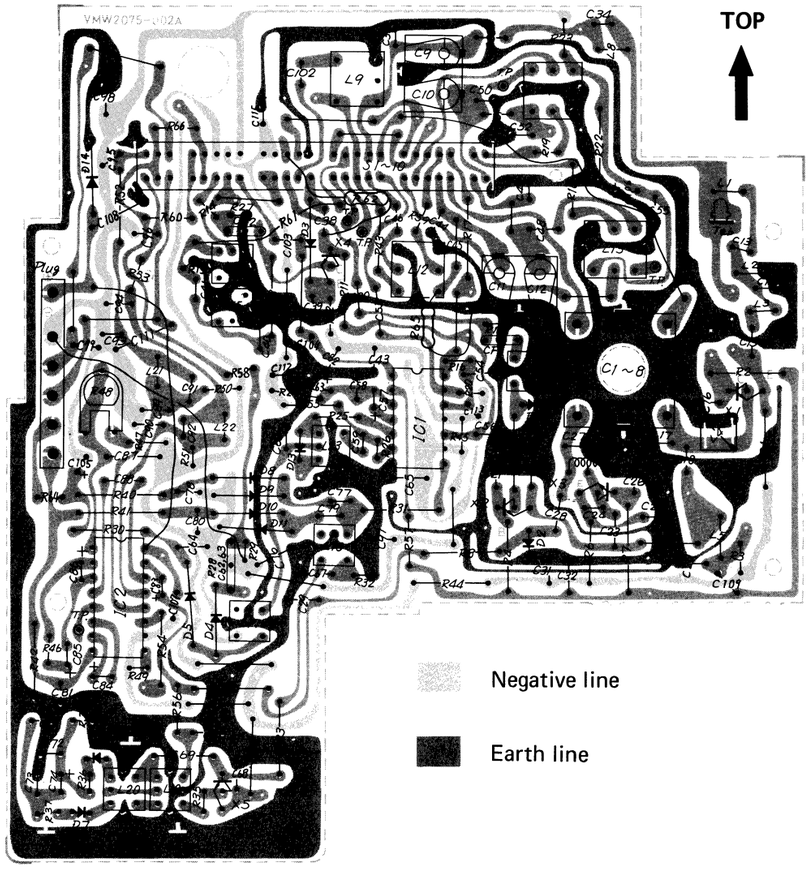


Fig. 2

Transistors

Ref. No.	Parts No.	Description	Pc	fT
X1, X2,3,5 X4	2SC1359(B) 2SC829(C) 2SC460(C)	Silicon (MATSUSHITA) " (") " (HITACHI)	0.25W " 0.2W	300MHz 230MHz "

ICs & Diodes

Ref. No.	Parts No.	Parts Name	Description
IC1	AN260	Integrated Circuit	MATSUSHITA (FM/AM IF)
IC2	AN362	"	" (MPX)
D1,3,10,13	1S2473	Silicon Diode	TOYO DENGU
D2	1S2790	Variable Capacitance Diode	HITACHI
D4,5	1N34A	Germanium Diode	"
D6,7	1N60P	"	"
D8,9,11	1N34A	"	"
D14	10D1	Silicon Diode	J.I.R.C.

Resistors

Ref. No.	Parts No.	Parts Name	Description
R1	QRD141K-152	Carbon	1.5kΩ 1/4W
R2,4,7,11	" -472	"	4.7kΩ "
R3	" -222	"	2.2kΩ "
R5	" -101	"	100Ω "
R6,12	QRD143K-182	"	1.8kΩ "
R8,9	QRD141K-224	"	220kΩ "
R10	QRD143K-471	"	470Ω "
R13	QRD141K-151	"	150Ω "
R14	QRD143K-181	"	180Ω "
R15	" -334	"	330kΩ "
R16	" -684	"	680kΩ "
R17	QRD141K-331	"	330Ω "
R18	QRD143K-331	"	" "
R19,23	" -102	"	1kΩ "
R20	" -332	"	3.3kΩ "
R22	QRD141K-332	"	" "
R24	QRD143K-683	"	68kΩ "
R25	" -101	"	100Ω "
R26	" -681	"	680Ω "
R27	" -391	"	390Ω "
R28	03126-15	CR Block	includes C62,63
R29	QRD143K-103	Carbon	10kΩ 1/4W
R30	QRD141K-182	"	1.8kΩ "
R31	" -101	"	100Ω "
R32	QRD143K-334	"	330kΩ "
R33	QRD141K-151	"	150Ω "
R34	" -102	"	1kΩ "
R35	QRD143K-471	"	470Ω "
R36,37,46,49	" -102	"	1kΩ "
R38,39	" -472	"	4.7kΩ "
R40,54	QRD141K-471	"	470Ω "
R41	" -223	"	22kΩ "
R42	" -224	"	220kΩ "
R43,57	QRD143K-470	"	47Ω "

Ref. No.	Parts No.	Parts Name	Description
R44	QRD141K-470	Carbon	4.7Ω 1/4W
R45	QRD143K-4R7	"	4.7Ω "
R47	" -223	"	22kΩ "
R48	QVP8A0B-014A	Variable	10kΩ B-curve
R50,51	QRD143K-222	Carbon	2.2kΩ 1/4W
R52	QRD141K-332	"	3.3kΩ "
R53,58	QRD143K-332	"	" "
R55	" -562	"	5.6kΩ "
R56	QRD141K-222	"	2.2kΩ "
R59	QRD143K-391	"	390Ω "
R60	" -103	"	10kΩ "
R61	QRD141K-474	"	470kΩ "
R62	QRD143K-334	"	330kΩ "
R63	" -105	"	1MΩ "
R64	" -221	"	220Ω "
R65	QRD143K-333	"	33kΩ "
R66	" -153	"	15kΩ "

Capacitors

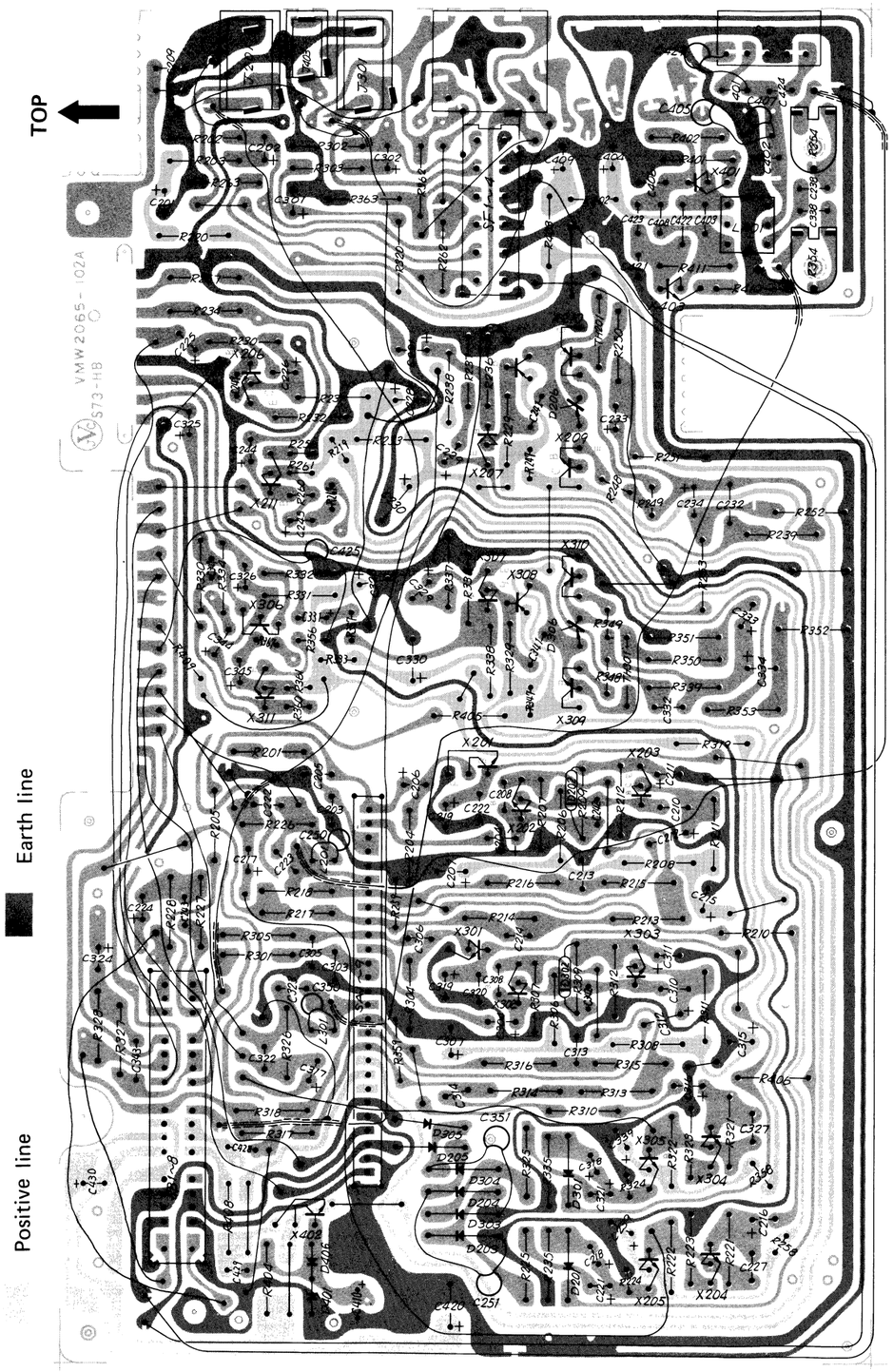
Ref. No.	Parts No.	Parts Name	Description
C1~8	QAP1224-504	Variable	
C9-10,11-12	QAT2002-001	Trimmer	
C13	QCS11HK-5R0	Ceramic	5pF 50V
C14	" -270	"	27pF "
C15,18,28	QCS11HJ-4R0	"	4pF "
C16,21,26	QCF11EZ-103	"	0.01μF 25V
C17	QCS11HK-220	"	22pF 50V
C19	" -150	"	15pF "
C20	" -271	"	270pF "
C23,34	QCS11HJ-3R0	"	3pF "
C24	" -120	"	12pF "
C25	QCS11HK-200	"	20pF "
C27	QCT05CH-220	"	22pF "
C29	QCF11EZ-473	"	0.047μF 25V
C30	QCY41HK-102	"	1000pF 50V
C31	QFM41HM-473	Mylar	0.047μF "
C32,39,43	" -223	"	0.022μF "
C33,47	QCS11HK-150	Ceramic	15pF "
C35,36,41	" -3R0	"	3pF "
C37	" -300	"	30pF "
C38	QFM41HM-103	Mylar	0.01μF "
C40	QCS11HK-471	Ceramic	470pF "
C44	" -100	"	10pF "
C45	QFS41HJ-332	Polystyrol	3300pF "
C46,59	QCY41HK-102	Ceramic	1000pF "
C48	QCS11HK-301	"	300pF "
C50	" -240	"	24pF "
C51	" -131	"	130pF "
C52	" -330	"	33pF "
C53	QCY41HK-332	"	3300pF "
C54	QFM41HM-473	Mylar	0.047μF "
C55,58,65	QCF11EZ-473	Ceramic	" 25V
C56,57	QEW41HA-474	Electrolytic	0.47μF 50V
C60	QCS11HK-471	Ceramic	470pF "
C62,63	03126-15	CR Block	includes R28
C64,67	QCF11EZ-223	Ceramic	0.022μF 25V
C68	" -103	"	0.01μF "

Ref. No.	Parts No.	Parts Name	Description
C69	QCS11HK-1R0	Ceramic	1pF 50V
C72,73,75,76	" -331	"	330pF "
C74	QEW41HA-335	Electrolytic	3.3μF "
C77	QCS11HK-220	Ceramic	22pF "
C78,80	QCF11EZ-223	"	0.022μF 25V
C79	QCS11HK-100	"	10pF 50V
C81	QEW41CA-106	Electrolytic	10μF 16V
C82,106	QEW41AA-107	"	100μF 10V
C83,84	QEW41HA-105	"	1μF 50V
C85	" -474	"	0.47μF "
C86	QEC81HM-224	"	0.22μF "
C87	QFS21HJ-391	Polystyrol	390pF "
C88	QFM41HM-473	Mylar	0.047μF "
C89,90	" -103	"	0.01μF "
C91,92	QCY41HK-152	Ceramic	1500pF "
C93,94	" -472	"	4700pF "
C95,96	" -562	"	5600pF "
C97,107	QFM41HM-223	Mylar	0.022μF "
C98	QEW41AA-108	Electrolytic	1000μF 10V
C99	QCY41HK-102	Ceramic	1000pF 50V
C102,103	" -472	"	4700pF "
C104	QCS11HK-101	"	100pF "
C105	QEW41AA-476	Electrolytic	47μF 10V
C108	QCS11HK-151	Ceramic	150pF 50V
C109	" -150	"	15pF "
C111	QCY41HK-102	"	1000pF 50V
C112	QCF11EZ-103	"	0.01μF 25V
C113	QFM41HM-472	Mylar	4700pF 50V
C115	QEW41HA-105	Electrolytic	1μF "

Others

Ref. No.	Parts No.	Parts Name	Description
L1,3	V03047-21	Coil	FM Antenna
L2	" -10	"	" "
L4	V03105-018	"	" RF
L5	03226-1K	Inductor	" IF trap
L6	V03080-015	Coil	" Osc.
L7	VQT7F12-103	I.F.T	FM
L8	V03047-11	Coil	SW Antenna
L9	VQR1001-202	"	" "
L12	V03101-025	"	" Osc.
L13	VQM1T03-201	"	MW Osc.
L14	VQL1T03-201	"	LW "
L15	VQT7A10-101	I.F.T.	AM
L16	VQT7A11-101	"	"
L17	" -302	"	"
L18	V03068-23	"	FM
L19	VQT7F15-502	"	"
L20	VQT7F16-602	"	"
L21,22	03226-18	Inductor	
L23	VQT7F11-202	I.F.T.	FM
CF1,2	V03059-3	Ceramic Filter	
S1~10	QSS0023-001	Slide Switch	Band Select
Plug	QMC0629-001	Plug Ass'y	6-pin
Tab	V43895-1	Tab	
T.P.	V04041-1	Test Point	

Amplifier Circuit Board Ass'y



Transistors

Ref. No.	Parts No.	Description	Pc	fT
X201,301	2SC1335(D,E)	Silicon (HITACHI)	0.2W	230MHz
X202,302	2SC644(R,S)	〃 (MATSUSHITA)	0.15W	
X203~207	2SC828(Q,R)	〃 (〃)	0.25W	220MHz
303~307				
X208,308	2SA564(Q,R)	Silicon (MATSUSHITA)	0.25W	80MHz
X209,309	2SD352(G,H,I)	Germanium (MATSUSHITA)	0.65W	
X210,310	2SB324(G,H,I)	〃 (〃)	〃	
X211,311	2SC828(Q,R)	Silicon (MATSUSHITA)	0.25W	220MHz
X401,402,403	2SD468(B,C)	〃 (HITACHI)	0.9W	190MHz

Diodes & Thermisters

Ref. No.	Parts No.	Parts Name	Description
D201,202,301,302	1S2473	Silicon Diode	TOYO DENGU
D203~205	1N34A	Germanium Diode	HITACHI
303~305			
D206,306	2SB175(A)	Termanium Transistor	MATSUSHITA
D401	HZ6C	Zener Diode	HITACHI
D406	1S2473	Silicon Diode	TOYO DENGU
TH201,301	TD5-A082HB	Thermister	〃

Resistors

Ref. No.	Parts No.	Parts Name	Description
R201,301	QRD141K-100	Carbon	10Ω 1/4W
R202,302	〃 -102	〃	1kΩ 〃
R203,303	〃 -222	〃	2.2kΩ 〃
R204,206,304,306	〃 -103	〃	10kΩ 〃
R205,210,305,310	〃 -272	〃	2.7kΩ 〃
R207,307	〃 -101	〃	100Ω 〃
R208,308	〃 -332	〃	3.3kΩ 〃
R209,309	〃 -104	〃	100kΩ 〃
R211,311	〃 -182	〃	1.8kΩ 〃
R212,222,312,322	〃 -561	〃	560Ω 〃
R213,313	〃 -682	〃	6.8kΩ 〃
R214,314	〃 -154	〃	150kΩ 〃
R215,216,315,316	〃 -103	〃	10kΩ 〃
R217,317	〃 -563	〃	56kΩ 〃
R218,318	〃 -104	〃	100kΩ 〃
R219,333	QRD143K-331	〃	330Ω 〃
R220,320	QRD141K-822	〃	8.2kΩ 〃
R221,321	〃 -104	〃	100kΩ 〃
R223,323	〃 -470	〃	47Ω 〃
R224,324	QRD143K-102	〃	1kΩ 〃
R225,325	QRD141K-681	〃	680Ω 〃
R226,238,326,338	〃 -153	〃	15kΩ 〃
R227,327	〃 -684	〃	680kΩ 〃
R228,234,328,334	〃 -333	〃	33kΩ 〃
R229,329	〃 -222	〃	2.2kΩ 〃
R230,330	〃 -334	〃	330kΩ 〃
R231,331	〃 -562	〃	5.6kΩ 〃
R232,332	〃 -101	〃	100Ω 〃
R233,319	〃 -331	〃	330Ω 〃
R235,335	〃 -102	〃	1kΩ 〃
R236,336	〃 -393	〃	39kΩ 〃
R237,337	〃 -150	〃	15Ω 〃
R239,339	〃 -152	〃	1.5kΩ 〃
R247,347	QRC123K-220	Composition	22Ω 1/2W
R248,249,348,349	QRW123K-R22	Wire Wound	0.22Ω 〃

Ref. No.	Parts No.	Parts Name	Description	
R250,350	QRD141K-221	Carbon	220Ω	1/4W
R251,252,351,352	" -101	"	100Ω	"
R253,353	" -182	"	1.8kΩ	"
R254,354	QVP8A0B-054A	Variable	50kΩ	B-curve
R256,356	QRD143K-102	Carbon	1kΩ	1/4W
R257,357	QRD141K-561	"	560Ω	"
R258,358	QRD143K-330	"	33Ω	"
R259,359	QRD141K-472	"	4.7kΩ	"
R260,360	QRD143K-474	"	470kΩ	"
R261,361	" -562	"	5.6kΩ	"
R262,362	QRD141K-105	"	1MΩ	"
R263,363	" -472	"	4.7kΩ	"
R266,366	QRD121J-4R7	"	4.7Ω	1/2W
R267,367	QRD143K-223	"	22kΩ	1/4W
R357	" -561	"	560Ω	"
R401,408,410	QRD141K-4R7	"	4.7Ω	"
R402,411	" -333	"	33kΩ	"
R403	" -100	"	10Ω	"
R404	" -221	"	220Ω	"
R405	" -473	"	47kΩ	"
R406	" -222	"	2.2kΩ	"
R409	" -473	"	4.7kΩ	"

Capacitors

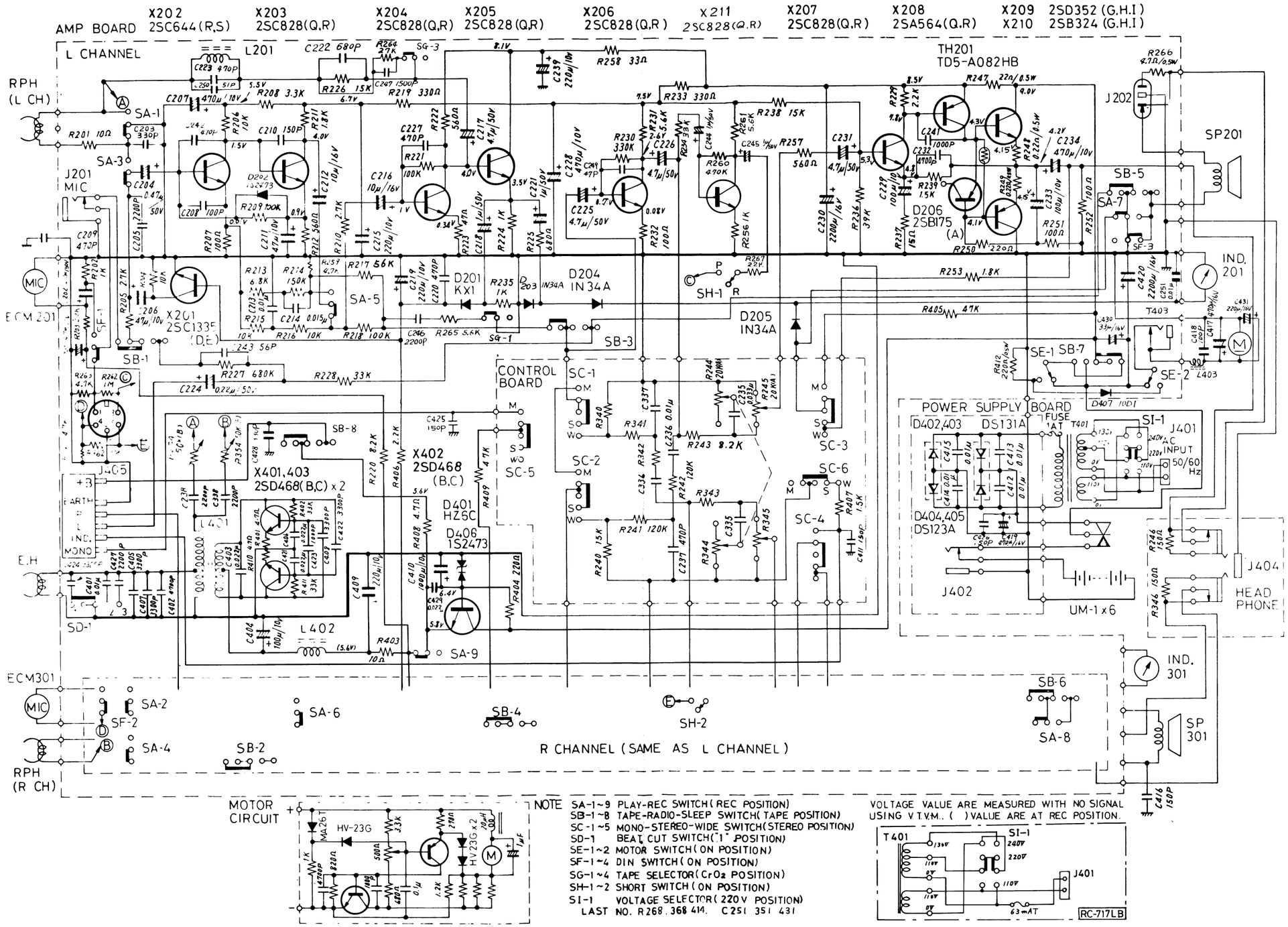
Ref. No.	Parts No.	Parts Name	Description	
C201,206,301,306	QEW41AA-476	Electrolytic	47μF	10V
C202,217,302,317	QEW41HA-475	"	4.7μF	50V
C203,303	QCS11HK-331	Ceramic	330pF	"
C204,304	QEW41HA-474	Electrolytic	0.47μF	"
C205,305	QCY41HK-222	Ceramic	2200pF	"
C207,307	QEW41AA-477D11	Electrolytic	470μF	10V
C208,308	QCS11HK-101	Ceramic	100pF	50V
C209,309	" -471	"	470pF	"
C210,310	" -151	"	150pF	"
C211,311	QEW41AA-476	Electrolytic	47μF	10V
C212,216,312,316	QEW41CA-106	"	10μF	16V
C213,313	QFM41HK-103	Mylar	0.01μF	50V
C214,314	" -153	"	0.015μF	"
C215,219,315,319	QEW41AA-227D09	Electrolytic	270μF	10V
C218,221,318,321	QEW41HA-105	"	1μF	50V
C220,223,320,323	QCS11HK-471	Ceramic	470pF	"
C222,322	QCS11HJ-681	"	680pF	"
C224,324	QEC81HM-224	Electrolytic	0.22μF	"
C225,226,325,326	QEW41HA-475	"	4.7μF	"
C227,327	QCS11HK-471	Ceramic	470pF	"
C228,234,328,334	QEW41AA-477D11	Electrolytic	470μF	10V
C229,233,329,333	" -107	"	100μF	"
C230,330	QEW41CA-228	"	2200μF	16V
C231,331	QEW41HA-475	"	4.7μF	50V
C232,332	QCY41HK-472	Ceramic	4700pF	"
C238,338	" -222	"	2200pF	"
C239,339	QEW41AA-227D09	Electrolytic	220μF	10V
C241,341	QCY41HK-102	Ceramic	1000pF	50V
C242,342	QCS11HK-471	"	470pF	"
C243,343	" -560	"	56pF	"

Ref. No.	Parts No.	Parts Name	Description	
C244,245,344,345	QEW41HA-105	Electrolytic	1μF	50V
C249,349	QCS11HK-470	Ceramic	47pF	"
C250,350	QCS11HJ-510	"	51pF	"
C251,351	QCF11EZ-103	"	0.01μF	25V
C401	QCY41HK-103	"	0.01μF	50V
C402	QFM41HM-472	Mylar	4700pF	"
C403,406	" -223	"	0.022μF	"
C404	QEW41AA-107	Electrolytic	100μF	10V
C405,407,408	QCY41HK-332	Ceramic	3300pF	50V
C409	QEW41AA-227D09	Electrolytic	220μF	10V
C410	" -108	"	1000μF	"
C420	QEW41CA-228	"	2200μF	16V
C421	QFM41HK-223	Mylar	0.022μF	50V
C422,424	QCY41HK-332	Cermic	3300pF	"
C423	" -102	"	1000pF	"
C425	QCS11HK-151	"	150pF	"
C427	QCY41HK-222	"	2200pF	"
C428	QCS11HK-331	"	330pF	"
C429	QCF11EZ-223	"	0.022μF	25V
C430	QEW41CA-336	Electrolytic	33μF	16V

Others

Ref. No.	Parts No.	Parts Name	Description
L201,301	03226-17	Inductor	
L401	V03083-019	Coil	Bias Osc.
L402	03226-2	Inductor	
SA1~9	QSS9201-001A	Slide Switch	Play/Record
SB1~8	QSS8301-001	"	Function
SF1~4	QSP4210-061	Push Switch	DIN
J201,202,301,302 403,SD1	V03104-057	Jack Board Ass'y	
J406	QMC9014-005	DIN Socket Ass'y	
Tab	V43895-1	Tab	
Clamp	V44691-001	Wire Clamp	

Schematic Diagram of RC-717L,LB (Amplifier)



NOTE

SA-1~9 PLAY-REC SWITCH (REC POSITION)
SB-1~8 TAPE-RADIO-SLEEP SWITCH (TAPE POSITION)
SC-1~5 MONO-STEREO-WIDE SWITCH (STEREO POSITION)
SD-1 BEAT CUT SWITCH ("1" POSITION)
SE-1~2 MOTOR SWITCH (ON POSITION)
SF-1~4 DIN SWITCH (ON POSITION)
SG-1~4 TAPE SELECTOR (CrO_2 POSITION)
SH-1~2 SHORT SWITCH (ON POSITION)
SI-1 VOLTAGE SELECTOR (220V POSITION)
LAST NO. R268. 368 414. C251 351 431

VOLTAGE VALUE ARE MEASURED WITH NO SIGNAL
USING V.T.V.M.. ( ) VALUE ARE AT REC POSITION.

Fig. 4